

INVITED REVIEW

QUALITY, CONTAMINANT-FREE LIVESTOCK PRODUCTS:  
PERCEPTIONS FROM AN IMPORTER OF AUSTRALIAN PRODUCTS

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INTRODUCTION

World meat trade grew dramatically during the 1980s. Australia is the world's largest beef exporting country. One fifth of total world beef trade and one fourth of the world's lamb exports are produced in Australia. The United States is a major customer of Australian meat products. The U.S. ranks first among beef importers with a 29% share of the world market.

Quality, contaminant-free livestock products are a prerequisite for all countries to maintain export markets. Customers purchase goods and services based on expectations they are acceptable for intended use. Customer expectations for meat products purchased in the United States will form the basis for this discussion.

FOOD SAFETY

Maintaining consumer confidence in the food supply is a major hurdle that the industry must address to increase demand and profitability. Food safety is a growing concern that cannot be ignored if exporters expect to compete in an international market.

The issue is one of both substance and perception. By most scientific evaluation, the U.S. and Australian meat supply is safe and wholesome. Nonetheless, the meat industry must recognize that negative perceptions are growing about drug residues and foodborne diseases.

*Residue prevention*

For over two decades, the U.S. Department of Agriculture has operated a nationwide residue monitoring program. The testing program has helped focus efforts toward improved use of animal drugs and pesticides. Residue violation rates have been dramatically reduced, but consumer concern about the use of chemicals in food production remains high.

The American meat industry has embarked on several major initiatives to increase emphasis on residue prevention. U.S. cattlemen and hog producers have developed and implemented quality assurance programs. Packers have participated in these producer education programs as well as developing testing systems to assure product quality.

Meat entering the U.S. is expected to be free of illegal residues. Residue violations are taken seriously by both the industry and the U.S. government. Reputations are at stake. Repeat violators are subject to import testing restrictions. Therefore, it behoves the exporting countries to establish residue prevention programs that can prevent trade disruptions.

*Microbiological control*

Meat products contaminated with pathogenic organisms pose a much greater threat to public health than chemical residues. The U.S. meat industry and the regulatory agencies have shifted emphasis to address this problem.

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During the past three years, the U.S. meat industry has devoted more time and energy to bacterial control than to any other public health and safety issue. The industry has researched ways to improve slaughter procedures and bacteriologically decontaminate carcasses.

Improved hide pulling methods, carcass prewashes prior to evisceration and reduction in airborne microbial contamination are being investigated. The U.S. industry will increasingly demand from exporters a microbiologically sound product that can reduce the likelihood of transmitting foodborne illnesses as well as increasing product shelf life.

#### DIET AND HEALTH

Educating the public about nutrition presents the meat industry with a tremendous challenge. Consumers are continually bombarded by dietary advice, much of it conflicting and confusing. They are largely uninformed or misinformed about potential dietary, health effects. Worse yet, nutritionally literate people don't always follow good advice.

Americans are obsessed with looking good, yet it is generally agreed that obesity is the primary cause of dietary diseases. Calories must be in balance with the body's energy requirements. Fat reduction, in response to consumer demand for leaner products, continues to be an industry objective.

Retail trim policies to reduce calorie intake and minimize consumer plate waste now average less than 1/4" on fresh retail cuts. The industry is seeking ways to eliminate waste fat while retaining the taste fat.

#### Nutritional labelling

Many dietary problems stem from blaming the food industry rather than people taking personal responsibility for dietary choices. Government-mandated nutritional labelling of food products has received strong support in the U.S. Exporters must pay attention to these developments.

Accurate and easy-to-read nutritional labelling can help consumers translate dietary recommendations into actual food choices. Sharp marketers use point-of-purchase nutritional information programs to educate consumers. Companies that provide meaningful nutritional information that allows consumers to make informed food choices will have an advantage in U.S. markets.

#### CONSUMER MARKETING TRENDS

Several forces are changing the way meat is marketed to American consumers. Industry experts rank convenience, nutrition, price and perceived value as primary marketing targets. Exporters that fit their products to changing consumer demands will derive a competitive advantage in the U.S. market.

#### Microwaveable meats

More microwaveable meats that can be prepared in less than 15 minutes will be introduced into the marketplace. Case-ready fresh meats with microwave cooking instructions, special microwave packaging for fresh and processed meats, and better flavour in microwave foods will continue to invade retail markets.

#### Health foods

More meats will be marketed as health foods with less fat and fewer calories. Superior nutritional qualities such as iron will be emphasized. Product labels, advertisements, and promotional materials will provide more nutritional information.

### *Smaller portions*

Meats will be sold in smaller portions to match shrinking household sizes. Smaller portion sizes to meet the desires for moderate servings of meat will translate into more boneless and closely trimmed meats.

### *Safer foods*

The meat industry will continue to improve product safety through integrated management systems from farms to supermarkets and food service operations. The manufacturer will be increasingly asked to guarantee food safety to the consumer. New technologies such as irradiation may prove useful.

### *Portable foods*

America's fast-paced lifestyle will demand more convenience foods to eat on the run. Microwaveable sandwiches and other prepared meats will lead this trend.

### *Consumer information*

Better information for consumers about meat safety, additives; nutritional attributes, cooking, handling, storage and serving suggestions will be demanded by the consuming public. Manufacturers will be forced to provide such information if they are to remain competitive in the U.S. market.

## **LIVESTOCK PRODUCTION AND MARKETING PRACTICES**

Humane treatment of animals, including the use of drugs and biologicals, will come under closer scrutiny. Changes in packer buying practices will dramatically alter the way livestock is produced.

### *Animal welfare*

The animal rights issue has emerged as a major concern to U.S. livestock producers. Several interest groups have the stated goal to seek a meatless society. 'Personal violence and destruction of property are tactics used. The message plays on emotions and draws media and legislative attention.

Recent national polls show a majority of U.S. citizens believe farm animals are humanely treated. Concerns about food safety and the environment outweigh those regarding animal welfare. Yet an increasing urban public strongly favours legislation to assure humane treatment of farm animals.

Animal welfare and animal rights concerns remain difficult issues to address because they deal with values, ethics, and emotions more than facts. The livestock industry's viability will be highly influenced by the animal rights movement.

### *Biotechnology*

The use of growth enhancers and other products of the biotechnology revolution can affect the marketability of meat products. The meat industry has several obstacles to overcome before it can comfortably accept the use of these products.

Pressure groups are forcing retailers and restaurants to take stands on selling products produced with growth enhancers. If the use of these products makes it difficult to market meat products, the industry will need to reassess their use. Production efficiency is of little value if the product is rejected by the consuming public.

*Value-based marketing*

The U.S. meat industry continues to seek a value-based marketing system that would financially recognize and reward superior animals and discount inferiority. Reducing excess fat while retaining acceptable palatability is an ongoing industry challenge.

The packing industry produces more boneless product today than in past years. As the industry moves towards boneless cuts, the value of lean becomes more important. Better measuring devices are needed to accurately estimate carcass leanness and improve carcass buying systems. Developmental work is in progress.

Payment systems based on carcass value rather than the live animal are actively being investigated as ways to reward leanness and discount fat. These grade and yield buying programs are being used to encourage genetic and feeding improvements in U.S. livestock production.

**SUMMARY**

The United States and Australian livestock complex is witnessing dramatic structural changes. Production, processing and marketing practices are changing to increase efficiency and meet the demands of a more sophisticated customer. Considerable progress has been made, but more must be done to compete with other protein foods in an international marketplace.