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Trends in meat market requirements: implications for producers

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ABSTRACT

With very few exceptions, consumers are becoming more discerning in their meat buying habits. This relates to such aspects as attractiveness of presentation, price, ease and quickness of preparation and cooking, degree of waste and fat content. The impact of these factors on consumption of red meat and red meat exports from New Zealand are examined with particular reference to response required from producers if they are to contribute effectively to maintaining New Zealand's status as a premier export meat nation.

INTRODUCTION

Some fundamental changes in the factors affecting red meat consumption patterns have taken place in the past 20 years. These changes are largely occurring in western-style markets with relatively high levels of meat consumption but some are apparent in other countries. The significance of these changes on the future direction of red meat production and processing are probably not sufficiently appreciated by many involved in and servicing the industry.

These areas of change can be summarised as follows:

Health and nutritional concerns.
Changing life styles.
Growth in availability of goods competing for disposable income.
Changing methods of retailing and presentation of meat.

Health and Nutritional Concerns

In some more developed countries there is a trend toward eating less red meat on dietary grounds. This trend has probably coincided with improvements in communication and the widespread propagation of views, some of which are soundly based but others which can only be regarded as fanciful. Many of the views expressed relating to the effects of meat consumption on health often ignore the qualifications and limitations of the research on which they are based and recommendations still open to challenge are taken as gospel. Nowhere is this more so than in the U.S.A. where government bodies have been as guilty as independent writers. Those advocating reduced meat consumption have not given adequate reasons, while specific recommendations to avoid saturated fat and cholesterol appear untenable because of lack of evidence that cholesterol lowering diets do actually reduce the risk of heart disease in humans. In spite of such recommendations being controversial, many people appear to have taken heed.

While not conceding that the increasing preference for lean meat has valid health grounds other than those of seeking to avoid obesity, we need to recognise this happening. Certainly we must seek to counter unjustified claims and promote the merits of meat but we must also respond by presenting leaner red meat, particularly as competing protein such as fish and poultry has much less fat.

Changing Life Styles

An increase in sedentary occupations combined with shorter working hours has resulted in a lesser demand for energy of which fat has been considered to be a most important source. Associated with this there appears to be less emphasis placed on the efficiency of conversion of muscle tissue as a source of protein and the importance of meat in the working man's diet.

The working housewife has introduced a new dimension. This has resulted in a demand for convenience meals that can be easily prepared and cooked quickly. There has also been an increase in the purchase of meals not prepared in the home. Increased activities outside the home has also meant people eating less often as a family, leading to a fall-off in meals based on roasts and other methods of cooking large joints.

Growth in Availability of Goods Competing for Disposable Income

There are signs that in some countries a negative income elasticity is developing with respect to consumption of some meat products. In part this indicates changing preferences for different types of meat, including an increase in consumption of further processed products such as salamis. It also reflects people's desire to obtain consumer durables, holidays and fashion clothing at the expense of food. Reflecting this is an apparent increase in cost-consciousness in relation to meat purchases and more attention being paid to avoidance of waste in meat, e.g., fat and bone.

Changing Methods of Retailing and Presentation of Meat

A growing proportion of meat sold to the consumer is through self-service retail operations. This limits the retailer's scope for 'pushing' a particular type of meat and also his ability to assist customers with advice as to preparation and cooking methods for unfamiliar meat types and cuts. Decision making on the meat purchase rests on the purchaser's sole judgement which increasingly focuses on comparative appearance and price. While dissatisfaction may not result in a complaint (because there is no butcher to complain to) it can lead to a reduced consumption of a particular meat type or of all meats in future.

This more competitive retail environment has been recognised by meat processors who endeavour to present their meat in a form that ensures retailers present it favourably. More and more meat and poultry is being pre-packaged and much in boneless form so avoiding the criticism of waste in the form of bone and excessive fat.

Running through all of the aspects of change is an increasing aversion of the part of consumers to fat. This is also evident in many non-western markets particularly in New Zealand's new outlets in the Middle East. Traditionally, these countries have preferred a relatively low fat diet with their requirements being based on vegetable oils.

This feature is of particular concern to New Zealand as not only is lamb regarded as fatty in comparison with beef and poultry but its fat is regarded by some as smelly and by many as being unpalatable when the meat is warm or cold. Further, the majority of it is still retailed 'bone in' with little or no trimming of fat, particularly so in the case of frozen lamb, while almost all beef and much pork is now being sold boneless or in trimmed 'bone in' form.

One British researcher has commented: "At the heart of the changes in market requirements is the increasing consumer demand for lean meat and reluctance to pay for fat, whether this be in London, Paris, Bonn or Brussels. The extent of the consumer aversion to fat is evident from the results of a survey conducted among 1500 people by the Meat Research Institute. These indicate that some 65% of children and 45 to 50% of adults cut off all lamb fat and leave it on their plates. The percentages are about 5% higher than those for beef and pig fat which are considered slightly more palatable."

"It is apparent from the rapid decline in sheep meat consumption in Britain over the last decade that the quality of the product is already failing more than other meats to satisfy demand. The lamb carcass is substantially fatter than the beef carcass, although still leaner that the pig carcass. However, there have been major reductions in the fatness of pigs in recent years which will almost certainly continue."

"A further factor contributing to the decline is the fact that demand from processors for sheep meat is insignificant in comparison with pork, largely due to the unattractive characteristics of the fat. It is more difficult to dispose of the cheaper cuts of mutton and lamb and there is little outlet for lamb and mutton trimmings in the form of manufactured products and sausages."

In the U.S.A. sheep producers are being told by supermarket buyers that consumers are today demanding more lean and less fat and the lamb industry has not completely met that need. Lambs carrying more than 5 mm of back fat have to be trimmed and the excess fat thrown away.

However, lamb is not alone in facing this problem. While Americans still eat more beef than other meat, the gap is narrowing.

In the last 5 years beef consumption has fallen 19% while poultry consumption has increased 20%. For example, consumers at fast food shops are increasingly by-passing hamburgers for chicken, fish or pork. Consumer interest in reducing fat in their diet is seen as a major reason; another is that inflationary pressures have kept beef prices high than those of chicken and other meats. In one recent national market survey the price of beef was $2.45, pork $1.54 and chicken 75c/lb. Where grain is a major element in meat production poultry and pork is winning hands down—it takes 8 lb of grain to produce 1 lb of beef and less than 3 lb for 1 lb of chicken. Further, the poultry and pork industry have made big genetic improvements in improving growth rates and the meatiness of their stock and the production systems are more efficient and integrated.

Reduction in fat and measures that contribute to improved appearance at retail along with steps to hold costs of production, processing and distribution in order to offer consumers competitive prices are the dominant messages that flow from consumers to producers of red meat generally.

There is a particular need to understand consumer concerns about lamb. This is because of its importance in our export earnings—our largest major meat export item earning 14% of all export income last year. Compared with our beef and mutton exports almost all of it is sold as an identified table meat which places stress on appearance at retail. In this respect, lamb is tending to become unique in western-style markets as still largely being presented to consumers in 'bone in' untrimmed form. In addition, New Zealand lamb comprises by far the largest volume of any single red meat sold to consumers in frozen form, with its disadvantages—some perceived and some real—of straight out prejudice, less attractive appearance, toughness and lack of convenience.

In the last few years there has been a dramatic shift in the direction of our lamb exports. In 1975, 75% of our lamb went to the U.K. whereas last year the figure was 40%. At the same time, sales to the Middle East increased from 6% to around 37%.

Considerably different ways of presenting and cooking meats in these regions exist, not forgetting further differences in other developing markets, such as Italy and Japan.

Fortunately there does not seem to be much conflict in requirements between the various markets we seek to serve. The universal requirement is for lean, meaty carcasses and provided that is met, weight within broad limits is of lesser importance. Tenderness is also highly desired but the need for building this in prior to export does vary according to the final handling and cooking method being used. Many of our customers would prefer to have fresh meat instead of frozen, in some cases because of prejudices against frozen meat as they incorrectly consider freezing either impairs eating 'quality' or camouflages meat that has gone off in 'quality' in the first place.

However, some major differences exist in relation to meat-eating habits, competition and methods of presentation of meat that have to be considered in the form and manner in which we present our lamb for sale.

The U.K. has been our longest customer—100 years—and has also been our single most important customer. As a result, we have been able to build up a very clear picture of the British consumer and changing consumption patterns.

Assembling our quantitative and qualitative survey data under the following headings, we find:

(1) Consumption Trends

Declining lamb and mutton consumption in total.

Increased consumption of pork, poultry and frozen convenience food.

Poor lamb performance in catering—a growth sector.

(2) Consumer Attitudes

Considerable objections to frozen carcass meat. (approximately 60% of NZL sold at retail is in frozen form, the rest being thawed slightly before sale).

Lamb has some negative attributes—fatty, bony, difficult carving.

The typical lamb consumer is getting older. Lamb purchase by the young is falling.

N.Z. lamb is seen as only average value for money.

(3) Buying Patterns

More of our lamb is being bought in a self-service situation which means:

The product is subject to more objective scrutiny by consumers than in butcher shops, and appearance is even more important than price.

Limited opportunity for butcher recommendation on how to prepare and handle difficult cuts which tends to be more of a problem with bone in meats such as lamb.

More of our lamb being presented in frozen form.

In some other western-style markets, lamb consumption is gratifying on the up. As incomes increase, consumers in countries not used to lamb are eating out more and are willing to experiment with new foods such as lamb. At the same time, the competitive factors that exist in the U.K. are present and some factors such as objection to excessive fat are even more crucial in determining purchase decisions.

Major factors characterising the Middle East markets for lamb are:

Preference for lean meat.

Preference for lighter-weight carcasses which probably reflects a preference for lean meat rather than objection to larger joints.

Some prejudice against frozen meat.

In-built tenderness not so necessary owing to slow cooking methods.

Increasing competition from other meats, especially chicken.

In the main, a requirement for carcass meat.

Our competitors overseas are responding to changing consumer requirements even if slowly in some instances.

On the production side we note that in the U.S.A. proposals are now being considered to allow leaner cattle to qualify for the top grades of beef while in the U.K. the E.E.C. price support scheme for lamb penalises production of excessively fat carcasses. There is a growing practice of leaving male cattle and pigs kept for meat production as entires and emphasis is being placed on the use of breeds of sire that produce leaner meat at a given weight. Those producers who can afford to use feed concentrates and provide winter housing also have greater scope for controlled response than producers relying solely on pasture.

To become competitive in price, improve appearance at retail and provide ease of preparation and carving, one retailer of British lamb has called for a turkey processing style operation to hoist sheepmeat into the 20th century. He goes on to say:

"We need a consistent, guaranteed supply of lean, heavier lambs that can be well butchered, boned out and rolled, to sell as an easy-carve roast. The breasts and flaps can go into manufacturing, the loins boned and rolled for roasting and slicing, to carve as easily as pork—so that you could have lamb rashers for breakfast. Lamb could be sold as a branded grocery item, which allays the cook's feeling of guilt at using a convenience food; and it would still retain its name as the last of the natural meats: not battery produced, nor hormoned; grown on grass out of doors."

The N.Z. meat processing industry to its credit has already ventured into developing new ways of presenting our lamb as a more attractive and versatile meat including boned and rolled roasts and boneless steaks. However, this approach is only in its infancy and much more initiative is required in this area. Further, there is an urgent need to find techniques that improve the red meat colour of retail packs of our frozen lamb as compared with fresh meat and to develop more moderatly priced packaging film that prevents misting and ice formation which is a particular need for lightweight packs and packs of awkward shape such as chops.

While boning and cutting operations give an opportunity for trimming excessive fat, this is a costly approach compared with encouraging producers to avoid its incidence in the first place.

Reduction of the fat content in the carcass must be the single most important implication of changing market requirements for N.Z. meat producers, be they producers of lamb, beef or mutton for consumption as a table meat or for use in manufacturing.

It is not a new concern but the message is that to continue giving customer satisfaction, farmers will have to produce even leaner lambs than many of those being slaughtered today. A recent survey of British wholesalers and retailers indicated they had a strong preference for lambs with a subcutaneous fat cover over the rib-eye area of no more than 4 mm. If we were to fully meet this preference within our total export production today, then around 25% of export lamb would not qualify. There is, however, probably more tolerance for fat cover as weight increases and the U.S.A. upper limit of acceptability already mentioned of 5 mm, reflects this with the average weight of their carcasses being 25 kg compared with our 13 kg average. In the beef industry there is also a need to reduce fat. Last season 29% of all prime cattle slaughtered entered the excessively fat grades G, T and E and the resultant cuts required moderate to heavy trimming to reach acceptable export standard. Mutton must also come under increasing scrutiny. Costs of processing and distribution in relation to market return could well result in it only being economical in future to slaughter the higher-yielding carcasses.

Reconsideration of slaughter weights is the other important message coming from the market. For all species killed for export, higher slaughter weights result in reduced per kilogram processing costs which must contribute to need to be competitive in our pricing. Achievement of this for lamb will also result in carcasses highly suitable for boning and further processing operations and allow greater penetration of the catering trade. Further, it will largely overcome concerns about lack of meatiness that are sometimes directed at cuts from lightweight carcasses. A degree of caution will need to be exercised. In many lamb consuming countries heavier weight carcasses sell at a discount no doubt because such carcasses tend to be fatter and with most countries not having a grading system, there is prejudice against heavy weights, whether they are fat or not. If we process our heavy lambs past the carcass stage before export, this should not be a problem but if excessive price discounts are to be avoided for carcass sales, time will be needed to convince customers that our heavy carcasses are consistently graded to a sufficiently lean standard.

The introduction of the PX grade represents progress in this direction. Increasing weight of beef carcasses also increases yield of saleable meat provided fat cover is kept down. Additionally, it allows us to cater for the preference for large steaking cuts for use in hotels and restaurants in the Pacific and in catering in North America.

A reduction in fat content and an increase in weights, must be the key objectives for producers if they are to effectively contribute to maintaining N.Z.'s status as an meat export nation.

Other considerations such as meeting good conformational standards and attaining good muscle development are important but should not be seen to diminish the importance of the two key objectives of reduced fat and increased weight.

The schedule pricing system this season generally appears to be fairly reflecting market preferences in conjunction with processing and distribution costs. However, it has been recognised for some time that there is a need to encourage more specifically the production of meatier lambs which can most efficiently be provided for through change in the grading and associated schedule pricing system. Such a change must, in the main, relate to a revised categorisation on the basis of fat content. A review of the export lamb grading system is at present giving consideration to this aspect.

The main reason behind changes not having been made earlier has been concern that breeders and producers have not had the tools to respond other than by reducing weights while the ability of the grading system to fairly and consistently segregate to finer limits has had to be assessed. It is encouraging that development of probes for measuring fat on live animals and on carcasses along with more quantitative methods of assessing consistency in carcass grading may shortly ease these restraints on such a necessary change. In the meantime, seminars and field days are being used as a means of indicating to producers the need for response with emphasis being put on management and breeding techniques that can be considered to bring about change.