

# RURAL ECONOMY

## Evaluating the Québec Beef Market: An Alberta Perspective

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Staff Paper 96-15

# STAFF PAPER



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## SUMMARY

In 1995 interprovincial beef exports accounted for 57% of Alberta beef production, while international beef exports only represented 24%. Québec accounted for approximately 50% of the interprovincial beef exports from Alberta and 28% of Alberta beef production. The Québec beef market has four unique characteristics:

- its degree of deficiency in high quality beef production
- its long distance from supply points
- the composition of retail stores in Québec
- it is the only market that purchases large quantities of grade “A” beef.

The overall objective of this study is to evaluate the Québec beef market from the perspective of the Alberta beef industry. The specific objectives are to (1) provide an updated background on the Alberta beef industry and the Québec beef market, (2) identify the perceptions of Québec beef buyers regarding Alberta beef compared with beef from other origins (US, Québec and Ontario) and (3) propose marketing strategies for Alberta beef producers and packers regarding the Québec beef market in order to maintain or increase their market share in the Québec beef market. The target segment is Québec’s market for high quality grain fed beef.

### **Methodology**

The background on the Alberta beef industry and the Québec beef market relied on secondary data which was supplemented by industry and government interviews. The perceptions of Québec beef buyers relied on primary data which were gathered via a direct survey of 7 wholesalers and retailers and 22 restaurateurs and purveyors serving higher quality beef. The survey includes two types of questions: quantitative and qualitative questions. A semantic differential scale was used to evaluate buyer’s perceptions of beef quality, merchandising, and promotional activities of Alberta, Québec, Ontario and the US. The quantitative questions were close ended questions and all possible answers were prespecified. This type of question was used because it is easy to tabulate and interpret. The Delphi technique was used for the qualitative component of the survey which included open ended questions. The qualitative questions complement the information gathered from the quantitative questions. The qualitative section asked respondents to provide their opinion regarding five issues: main beef attributes influencing beef purchasers in Québec, marketing and distribution of beef in Québec, origin of beef and branding, political issues and the future of the Québec beef market.

### **Background**

Alberta is the largest cattle and beef producing province in Canada. The Alberta beef processing sector undertook considerable rationalization which resulted in fewer and larger scale operations. Furthermore, this sector is expanding and the number of cattle slaughtered in Alberta is expected to increase significantly. Although Alberta exporters have developed the international

export market for beef, the domestic market, particularly Québec, remains the main purchaser of Alberta beef. Québec mainly purchases grade “A” beef and constitutes the main destination for grade “A” beef produced in Alberta. Alberta beef packers want to maintain their market share in the Québec beef market.

Québec has the largest beef deficit in Canada. Two factors may serve to explain this large deficit. Cattle and beef production has declined over the last ten years in Québec. In addition, the beef processing sector operates with excess capacity and it is not able to guarantee an adequate supply to Québec beef buyers. The second factor discussed is the strong demand by Québécois for beef. Québécois consume on average 20% more beef per capita than the average Canadian. A large part of this consumption is imported from Alberta although US beef has gained in importance over the last ten years. However beef substitutes such as pork and chicken gained in popularity among consumers, particularly in the restaurant sector due to promotion. Pork and chicken may continue to provide strong competition to the beef market in the future.

### **Retailer and wholesaler survey results**

Marbling, price and meat color were considered the most important beef attributes by Québec wholesalers and retailers. Alberta beef was rated highest for meat color and marbling, and rated lowest for price. Alberta beef was rated highest for all other beef attributes in comparison to the other beef suppliers (US, Ontario and Québec). However, Québec wholesalers and retailers rated negatively the effectiveness of promotion by both the Alberta beef industry and the government. Not all of these differences were statistically significant, however they may still indicate economic importance. Québec wholesalers and retailers have a strong preference for Alberta beef. Nevertheless, they occasionally purchase beef from the US due to lower prices and the availability of certain cuts such as inside rounds. Alberta beef packers face excess demand from Québec regarding inside round cuts.

Box beef is largely predominant in Québec and it will continue to gain popularity in the future. Case ready beef interests retailers and wholesalers, however there is a lot of uncertainty regarding this technology. Shelf life, consumer acceptance, price and the reluctance of affiliate retailers to accept case ready beef into stores are among the hurdles that retailers and wholesalers identified. Québec wholesalers and retailers were not enthusiastic about branded beef products from Alberta. They stressed that an information campaign prior to the introduction of a branding program would be necessary.

Québec wholesalers and retailers do not foresee any increase in the consumption of beef in Québec due to an aging population and strong competition from the pork and chicken industries. They believe that case ready beef will be more popular in the future as well as beef products which are easy-to-prepare.

### **Restaurateur survey results**

Restaurateurs who serve higher quality beef cuts mentioned marbling, aging and price as the most important beef attributes. Alberta beef was rated highest for aging, while US beef was rated highest for marbling and price. Alberta beef was rated higher than US beef for all other beef attributes. The effectiveness of promotion was rated low for both Alberta and the US. Other beef attributes were considered to be important by restaurateurs. These are; consistency of the quality, fat trim and origin.

Québec restaurateurs are major purchasers of Alberta beef. However they sometimes purchase beef from the US due to lower prices and greater availability of beef products with more marbling. They would like to receive more information from Alberta beef packers on Alberta beef products. Restaurateurs desire better contact with Alberta beef packers.

Portion cuts are used by many restaurateurs in Québec. However, the majority of restaurateurs surveyed do not utilize portion cuts. Their stated reasons for not using this technology were price and the lack of flexibility with this technology. Although portion cuts are used in Québec, there is potential for greater use of this concept in the medium and long term.

Branded beef products from Alberta raised strong interest among restaurateurs. They are willing to promote Alberta beef in restaurants. The majority of the restaurateurs believe that the identification of Alberta beef would have a positive impact on beef consumption in restaurants. Beef consumption in Québec is not expected to increase in the future due to the aging population, beef substitutes and the concern for fat content among Québécois. Restaurateurs stressed that it is possible to maintain beef consumption at current levels with greater information and better education about the benefits of beef products. They also expect that lower prices, particularly from Alberta, would contribute to the maintenance of current levels of beef consumption in Québec.

Although the issue concerning Québec independence raised some concern among representatives of the beef industry in Alberta, these concerns were not present among Québec beef buyers. All retailers, wholesalers and restaurateurs mentioned that nothing would change concerning the beef trade between Alberta and Québec if Québec and the rest of Canada were separated unless there are economic incentives to do so. They want to maintain their positive relationship with Alberta beef packers.

## **Marketing strategy recommendations**

The review of the final results leads to several marketing strategy recommendations for the Alberta beef industry and the Government of Alberta. These strategies are discussed in terms of four broad topics.

- **Development of an educational program**

- a) *Consumers*

- Wholesalers and retailers noted that more information regarding beef products would be

useful for consumers. This educational program would complement information already provided by the Beef Information Center. The Alberta beef industry has the option of providing information on the origin of beef, raising conditions of the cattle, (such as unpolluted air, natural water resources) and food safety standards in the packing plants (HACCP). Information regarding marbling content and aging may also be provided since, for example, most consumers are not aware of the fact that longer aging means greater tenderness.

*b) Restaurateurs*

Restaurateurs would like to have direct contact with Alberta packers. Alberta beef packers could provide the same information to restaurateurs as consumers. Of interest are food safety standards in the packing plants, raising conditions of the cattle, information regarding new beef products and new marketing practices.

- **Branding and portion cuts**

An Alberta brand name beef product could be created for restaurateurs serving high quality beef. The product would contain a high level of marbling (grade “AAA” or “Prime), aged between 10 and 21 days or more depending of the needs of the restaurateurs and the product would be carefully trimmed. Portion cuts would guarantee a product of consistent quality. According to the qualitative results, 40% of restaurateurs utilize portion cuts. This indicates the potential for the success of this technology. In addition, portion cuts would assure restaurateurs that the beef they purchase is sourced from Alberta. The purpose of branding and portion cuts would be to offer restaurateurs beef products that meet their specifications (i.e. marbling, aging and fat trim).

- **Case ready**

Case ready beef has raised interest among Québec wholesalers and retailers. It is incumbent upon Alberta beef packers to take the lead, and to offer case ready beef products on a trial basis to Québec wholesalers and retailers. Case ready beef may represent an alternative for Alberta beef packers in regards to holding or increasing their market share in Québec. Case ready beef would ensure that Alberta beef packers have firm demand from beef buyers.

- **Price**

The quantitative and qualitative results of the survey indicate that the price of Alberta beef is a major concern among respondents. Alberta beef producers and packers must improve feedlot productivity and beef packing plant efficiency. The assistance of the government of Alberta is essential in this process. While the government of Alberta no longer funds beef promotion in Québec, its role should be to ensure through research and development the competitiveness of the Alberta beef industry. Research is needed for case ready and portion cut technologies to ensure a sufficient shelf life that will allow distribution of beef to the main regions of Québec. Research and development in Alberta could lead to more competitive pricing between Alberta beef and US beef in the Québec beef market.



## Chapter 1: INTRODUCTION

### 1.1 Background

The Québec market was very important to the Alberta beef producer (Agricultural Economics Research Council of Canada, 1977). Beef shipments from Alberta to Québec were the largest trade movements of beef in Canada twenty years ago. At the time, Québec purchased approximately 230,000 tonnes of beef from outside the province and Alberta accounted for 65% of this requirement.

Alberta beef packers have made tremendous efforts throughout the past 10 years to increase beef exports to the United States (US) and to the Pacific Rim (Table 1). However, the domestic market, particularly the Québec market remains the main destination for Alberta beef (Alberta Agriculture, Food and Rural development, 1996). In 1995, interprovincial beef exports accounted for 57% of Alberta beef production while international beef exports only represented 25%. Québec accounted for approximately 50% of the interprovincial beef exports from Alberta.

Alberta beef exporters have faced many challenges in developing beef export markets in the US and the Pacific Rim. The Canadian International Trade Tribunal (CITT, 1993) and the Red Meat Forum Project (MacMillan et al., 1994) studies state that the Pacific Rim market is very competitive; Canadian beef producers are not alone in this market. There is a stiff competition from the US, Australia and New Zealand. In addition, both studies mention that Canadian beef producers are at a disadvantage in the US market for the following reasons:

- lack of US recognition of the Canadian grading system,
- failure of the US to fully implement an agreement to eliminate border inspection,
- fluctuations in the value of the Canadian dollar.

The domestic market is potentially more reliable for Alberta beef suppliers since these nontariff barriers do not exist. However, the domestic beef market has also become more competitive over the last ten years due to the stronger presence of US beef suppliers. For example, Québec's beef imports from the US were ten times greater in 1994 compared with imports of US beef in 1986 (MAPAQ, 1985-1995).

The Agricultural Economics Research Council of Canada (1977) study also stressed the uniqueness of the Québec beef market. Twenty years later, Québec is still a unique market in Canada in four respects:

- its degree of deficiency in high quality beef production (MAPAQ, 1994),
- its long distance from supply points (MAPAQ, 1994),
- the composition of retail stores in Québec versus the rest of Canada (Anonymous, Feb. 1995),

- it is the only market that purchases large quantities of grade “A” beef (Thomas, August 1995).

Each of these points is discussed later in the study.

The increase in the quantity of imported beef from the US has created a number of questions. What is the quality of the product being imported ? Is US beef perceived to be less expensive than beef from other origins? Assuming that Alberta beef producers and packers want to maintain or increase their share of the beef market in Québec, these questions require answers. In addition, there is a need to identify the perceptions of Québec purchasers regarding beef from Alberta and from other origins, as well as the need to examine the unique characteristics of the Québec beef market. This will help the Alberta beef industry develop an efficient marketing strategy in the Québec beef market.

## 1.2 Study objectives

The overall objective of this project is to evaluate the Québec beef market from the perspective of the Alberta beef industry. The target segment is Québec’s market for high quality beef<sup>1</sup>. Alberta mainly produces high quality beef<sup>2</sup>, while a large part of the beef deficit in Québec consists of high quality beef. Because beef information concerning the Québec consumer was already available from the Beef Information Center (BIC, 1992), Foug (1990) and various studies in Québec, the beef trade sector was chosen. The beef trade sector includes wholesalers, retailers and restaurateurs.

There are three specific study objectives:

1. provide an updated background on the Alberta beef industry and the Québec beef market,
2. identify the perceptions of Québec beef buyers regarding Alberta beef compared with beef from other origins,
3. propose marketing strategies for Alberta beef producers and packers regarding the Québec beef market in order to maintain or increase their market share in the Québec beef market.

The achievement of the first objective will contribute to a better understanding of the beef trade between Alberta and Québec. Subsequent to the “Agricultural Economics Research Council of Canada (1977)” study, only one study has been published regarding the beef trade between Alberta and Québec (Foug, 1990). There is a need to provide updated information concerning the beef trade between Québec and Alberta. The second objective will permit Alberta beef producers and packers to update their knowledge of what Québec purchasers consider to be the most important beef attributes. In addition, the results of the survey will allow the Alberta beef industry

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<sup>1</sup> High quality beef corresponds to Canada grade “A” or higher grades, or US “Standard” or higher grades.

<sup>2</sup> In 1995 approximately 78 % of total slaughter cattle in Alberta were graded “A” or higher (Agriculture and Agri-Food Canada, 1986-1995).

to evaluate the awareness of Québec beef buyers regarding promotional activities by Alberta and by other beef suppliers. This information is crucial to facilitate the positioning of Alberta beef in Québec. The achievement of the third objective will help the Alberta beef industry to identify the most relevant actions to implement in order to maintain or increase its market share in the Québec beef market.

### **1.3 Methodology**

A number of methodologies were used to fulfill the objectives of the study. The background information on the Alberta beef industry and Québec beef market was obtained from secondary data which was supplemented by information from interviewing industry and government representatives. These interviews also provided information used to prepare a questionnaire for beef buyers in Québec. The second objective was achieved via a direct survey of wholesalers/retailers in Québec and restaurateurs serving high quality beef in Québec. The primary data gathered from the survey are reliable sources of information in regards to explaining the large beef trade between Alberta and Québec. The data also explain the significant presence of the US in the Québec beef market during the last ten years. Chapter 4 provides further details on the methodology used in the survey.

### **1.4 Study plan**

The remainder of this report is organized into five chapters. Chapter 2 provides a profile of the cattle and beef industries in Alberta. An historical overview of the cattle and beef production and beef export markets are provided along with a review of developments in the marketing and distribution of beef in Alberta. Chapter 3 describes the Québec beef market. This includes a discussion of the beef industry, the structure of the retail and restaurant sectors, and the demand for meat in Québec. Chapter 4 discusses the methodology of the survey as well as the relevance of the results to beef suppliers. Chapter 5 describes and discusses the results of the survey. Results are separately discussed for each group interviewed: the wholesalers and the retailers, and the restaurateurs. Finally, a summary of the results, marketing strategy recommendations and suggestions for future research are presented in Chapter 6.

## **Chapter 2: ALBERTA BEEF INDUSTRY PROFILE**

To properly understand the beef trade between Alberta and Québec, it is necessary to develop an understanding of the Alberta beef industry. This chapter reviews the production of live cattle and beef, the beef processing sector and the developments in the marketing and distribution of beef in Alberta. It also examines international and interprovincial markets for Alberta cattle and beef and provides the framework for analysing the position of Alberta beef in the Québec beef market.

### **2.1 Production of live cattle and beef**

## **2.1.1 Production of live cattle**

### **2.1.1.1 Economic significance**

In Alberta, cash receipts from cattle increased from \$ 1.1 billion in 1986 to \$ 2.2 billion in 1995; a 100% increase over ten years <sup>3</sup>. Alberta is the largest cattle-producing province in Canada accounting for 52% of Canadian cattle receipts in 1995 (Statistics Canada, 1995). In 1986, marketing of slaughter live cattle that originated from Alberta totalled 1,214,200 cattle which represents 36.2% of Canada's total slaughter live cattle sales. Over a ten year period marketing of slaughter live cattle in Alberta increased by 58.6% to 1,925,200 cattle accounting for 56.6% of Canadian slaughter live cattle sales (Agriculture and Agri-Food Canada, 1986-1995).

### **2.1.1.2 Feedlot operations**

Cattle production is an integral component of Alberta's agricultural sector. Cattle is one of Alberta's major agricultural exports. The average feedlot operation in Alberta consists of 602 head of cattle compared with 158 head in Ontario and approximately 75 head in Québec (CITT, 1993 and Boivin, Oct.1995). The Canadian International Trade Tribunal (CITT) study (1993) suggests various factors which explain the predominance of cattle feeding in Alberta. These are:

- large grain production,
- competitive grain prices,
- adequate supply of feeder cattle,
- efficient slaughtering facilities,
- moderate climate and low precipitation.

The combination of these attributes allows Alberta to maintain its dominant position in the Canadian cattle industry.

### **2.1.1.3 Beef cow herd expansion**

Table 2 provides data regarding the beef cow herds in both Canada and Alberta between 1986 and 1995. In 1986, there were 3,201,900 beef cows in Canada. By 1995, the beef cow population had risen 38% to 4,416,800. In Alberta, the beef cow herd grew 42% from 1,303,000 cows in 1986 to 1,848,000 cows in 1995. By 1995, Alberta's beef cow herd accounted for 42% of Canada's beef cow herd. Herd expansion which began in 1987 is expected to continue through 1996, although the rate of growth should slow down (CITT, 1993 and Canfax, May 1996).

## **2.1.2 Beef production and quality**

Between 1986 and 1995, total beef production in Alberta increased 53% from 318,900 tonnes to 486,600 tonnes (Table 1). Beef production in Alberta increased by a greater amount

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<sup>3</sup> Nominal returns.

than the slaughter cattle output due to higher average carcass weight<sup>4</sup>. This increase in production is also reflected in the number of carcasses graded “A”. In 1986, there were 942,400 carcasses graded “A1”- “A4”<sup>5</sup> in Alberta, accounting for 42% of the total carcasses graded “A1”- “A4” in Canada. In comparison, in 1995, there were 1,192,900 carcasses graded “A”, “AA”, or “AAA”, accounting for 63% of total Canadian carcasses graded “A” to AAA” (Table 3). Alberta’s share of Canadian production of high quality beef has greatly increased over the last ten years.

The grading system in Canada was modified in 1992 to address changes taking place in the market, and to bring the Canadian system in line with the US system. Marbling was added as a criterion for high-quality grade “A” beef. Under the new system, Canada Grade “A” (trace marbling) is very lean and is comparable to USDA “Standard”. Canada Grade “AA” (slight marbling) is comparable to USDA “Select”, and Canada Grade “AAA” (small and abundant marbling) is comparable to USDA “Choice” (CITT, 1993). In 1996 there was a proposition to once again modify the grading system in order to introduce a new grade: “AAAA” or Canada “Prime”<sup>6</sup>. Canada “Prime” would be equivalent to USDA “Prime”, the top beef grade in the US. Canada “Prime” was proposed at the request of Canadian restaurateurs and beef buyers in the Pacific Rim who desire beef with a high level of marbling (Anonymous, May 1996). Table 3 shows the number of carcasses graded “A”, “AA”, and “AAA” or “A1”- “A4” for selected years between 1986 and 1995. Data for selected years between 1986 to 1990 has been aggregated into one number, while for selected years between 1992 to 1995 the number of carcasses for each individual grade ( “A”, “AA” and “AAA”) is provided. Alberta beef producers have adjusted production in keeping with the needs of the domestic<sup>7</sup> and export markets toward “AA” and “AAA” marbling. In 1992, there were 287,500 carcasses graded “A”, 394,000 carcasses graded “AA”, and 196,400 carcasses graded “AAA”. By 1995 the number of carcasses graded “A” had increased by only 1.8% while the number of carcasses graded “AA” and “AAA” had increased by 56% and 45% respectively. There is a clear trend toward the production of beef with more marbling in order to meet the demand.

## 2.2 Beef processing sector

The slaughter cattle processing sector in Alberta became more concentrated between 1986 and 1995. There are now only four major packers in Alberta; Cargill Foods (High River), IBP-Lakeside Packers (Brooks), X-L Beef (Calgary) and Burns Meats (Lethbridge). In 1995, the total

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<sup>4</sup> In 1986 average carcass weight was 629 pounds. In 1995 average carcass weight had risen to 715 pounds (Agriculture and Agri-Food Canada, 1986-1995).

<sup>5</sup> Before 1992, the yield designation of 1 through 4 was attached to the quality designation A1, A2, etc... A yield of “1” identified a lean carcass while a yield of “4” identified a fat carcass (Peat Marwick, 1989).

<sup>6</sup> Canada “Prime” should be available by February 1997 (Duckworth, August 1996).

<sup>7</sup> Québec is a particular market where consumers like lean beef usually “A” grade. In 1995 the volume of beef graded “A” in Alberta roughly corresponds to 65% of total Alberta beef exports to Québec.

slaughter capacity of these packers was estimated to be approximately 30,000 cattle per week. The two largest packers: IBP and Cargill are doubling their slaughter capacity, which will bring the total slaughter capacity in Alberta to nearly 58,000 cattle per week. There is the potential for approximately three million cattle a year to be slaughtered in Alberta. After the expansion, Cargill and IBP will slaughter approximately 90% of the total cattle slaughtered in Alberta (Personal conversation with Alberta beef packers, May 1996).

In 1986 1,142,600 cattle were slaughtered in Alberta compared with 3,245,900 in Canada. Ten years later, in 1995, the number of cattle slaughtered in Alberta had increased 34% to 1,537,200 compared with 2,704,500 cattle slaughtered in Canada (Table 3). In 1986, cattle slaughtered in Alberta accounted for 35% of total cattle slaughtered in Canada; while in 1995, Alberta's share of the total number of cattle slaughtered in Canada increased to 57% (Agriculture and Agri-Food Canada, 1986-1995). In summary, there has been a major decline of the total number of cattle slaughtered in Canada in the last ten years mainly in Eastern Canada, Saskatchewan and Manitoba. There was a major increase of the number of cattle slaughtered in Alberta. These data confirm that the Canadian cattle and beef processing sectors are now highly concentrated in Alberta.

### **2.3 Developments in the marketing and distribution of beef in Alberta**

There have been many developments in the marketing and distribution of beef in Alberta during the 1980's and 1990's. A new method of marketing and distributing beef; counter-ready or case-ready beef has been slowly introduced. The fundamental tenet of this technology is to process primal beef cuts into retail specific cuts. These cuts are then trayed and wrapped in a manner which minimizes or eliminates contact with the main cause of quality deterioration in meat; i.e. exposure to oxygen<sup>8</sup>. Traditionally packaged fresh meat has three to four days of shelf life. In contrast, case ready packages can extend the shelf life of the meat for up to six weeks when stored under ideal conditions<sup>9</sup>. However, the case ready products processed by packers and processors in Alberta do not have a shelf life longer than 14 days. Case-ready may give the opportunity to packers or processors to promote their product with a brand name<sup>10</sup>. In addition, if beef is processed into retail ready cuts at the packing plant, it helps to introduce a Hazard Analysis Critical Control Points (HACCP) system. The HACCP system requires meat processors to identify all critical points along the processing chain where contamination could occur (Tower, July 1996). This allows meat processors to analyse their operations and make improvements which ensure the safety and wholesomeness of the products (Nunes, May 1996). All processing

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<sup>8</sup> There are three main methods of producing case ready beef : vacuum packaging, modified atmospheres packaging (MAP) and master packaging under modified atmospheres. Vacuum packaging is oxygen free while MAP and master packaging usually contain a certain percentage of oxygen (Gill and Jones, 1994 a).

<sup>9</sup> Vacuum packaging method.

<sup>10</sup> Brand is defined as "any name, sign, symbol or design used to identify the products of one firm and set them apart from competitor offerings"(Kohls and Uhl, p.521, 1990).

activities including final packaging can take place in the same plant allowing for better control (BIC, 1994 and Thomas, Dec. 1994).

### Advantages of case ready packaging

The goal of case ready packaging is to increase the efficiency of the distribution of fresh meat at a more economical price than conventional packaging. Packers, retailers and consumers benefit from this new type of technology. By processing the meat on an assembly line at the manufacturing stage and by realizing economies of scale, the packer may benefit financially from a value-added product. The packer also reduces product shrinkage and can better utilize the by-products when in-store processing is eliminated. Retailers also experience benefits from case ready packaging. The retailer may benefit from reduced labor costs by employing less staff for meat cutting. Some retailers may choose to eliminate their meat cutting facility completely. Another advantage of case ready is the flexibility it gives to the retailers. Previously, with the conventional packaging technique, the retail store would have to slice and tray a whole primal or sub-primal if a particular cut was out of stock. Now the meat staff can simply display the cuts required. Also, under a case ready program, the retail outlet is given greater flexibility in ordering stock. The consumer benefits by having a wider selection of available cuts to choose from. The consumer is guaranteed a product of consistent quality. Finally the gain in efficiency of the retailer and the packer may be passed on to the consumer. Increased market share allows the consumer to benefit from lower prices. Thus, at the level of the packer, retailer and consumer, numerous benefits are derived from the advent of case ready beef packaging (BIC, 1994 and American Meat Institute, 1988).

### Disadvantages of case ready packaging

There are some disadvantages with case ready technology. The two main factors in prolonging shelf life are temperature and distribution. Fluctuations in temperature drastically reduce the length of time that meat can be stored. Stringent production procedures must be implemented to maintain appropriate temperatures and a high sanitation level. The distribution system is another main concern especially for those case ready products with a short shelf life. One of the main obstacles in obtaining retailer and consumer acceptance is the loss of color or “bloom” of case ready fresh meat. When beef is stored in an oxygen free environment, it turns purple which is not an attractive color to the consumer (Gill and Jones, 1994 b)<sup>11</sup>. Another hindrance to obtaining retailer and consumer acceptance is that the packaging is different in appearance to the conventional packaging method in the case where the MAP method is employed<sup>12</sup>. In addition to temperature and distribution factors, there are concerns among grocery store meat cutters that they may lose their jobs. As retail outlets move towards case ready beef, the demand for qualified meat cutters will decrease (Duckworth, July 1996).

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<sup>11</sup> This process only occurs with the vacuum packaging method. However the process is reversible; the undesirable purple color can be converted to desirable red once the beef is exposed to the oxygen (Gill and Jones, 1994 b).

<sup>12</sup> There is some concern regarding excess packaging with this method of case ready beef.

Case ready beef packaging has been slow to catch on in the retail beef market in Alberta. Three major food retail chains currently utilize case ready beef products in Alberta. Safeway-Lucerne processes its own case ready products at a central processing plant. Save-on-Foods-Overwaitea purchases its case ready products from an independent central processor in Alberta. Calgary Coop buys its case ready products directly from the packer, X-L Foods. In all instances, case ready products are not sold exclusively in store. In each store where some case ready beef is offered, there are still beef products on the shelf which are cut in store (Personal conversation with Alberta retailers and beef processors, March 1996).

Although there are numerous benefits to packers, retailers and consumers, acceptance of case ready technology has been slow. To date, the only Alberta beef packer to become involved in the case ready program is X-L Foods. In the short term, there appears to be no evidence of Alberta beef packers becoming more heavily involved (Personal conversation with Alberta beef packers, May 1996).

## **2.4 Alberta beef markets**

### **2.4.1 International exports of cattle and beef**

#### **2.4.1.1 Cattle exports**

Table 3 shows the number of live cattle exports from Alberta to the US between 1986 and 1995. Exports increased 624% between 1986 and 1990 from 27,200 head to 196,900 head. Between 1990 and 1995, exports of live cattle more than doubled from 196,900 head to 424,100 head. Canadian exports of live cattle to the US increased by 357% during the course of the 10 year period from 157,257 to 718,484 cattle. In 1986, approximately 17% of Canada's total exports of cattle came from Alberta. In 1995, approximately one half of all Canadian exports were Alberta based (Agriculture and Agri - Food Canada, 1986-1995). Alberta's cattle exports have clearly increased considerably over the last ten years. Thus, as a growing export earner, cattle have become an important component of Alberta's agricultural sector.

There are many factors which may explain the considerable increase in live cattle exports from Alberta over the past ten years. Among these factors are:

- the introduction of the North American Free Trade Agreement (NAFTA) in 1987 (Faminow and Ward, 1994),
- strong demand by US packers for slaughter cattle (CITT, 1993),
- lower slaughter costs in US plants compared with Canadian plants (Faminow and Ward, 1994 and CITT, 1993),
- exchange rate: the Canadian dollar was low relative to the US dollar particularly between 1992 and 1995 (USITC, 1993 and Statistics Canada, 1995)
- Alberta has historically been a region with a surplus of slaughter cattle and costs of production for feedlot operations are lower compared to those in the US-Great Plains regions; this may explain lower prices for slaughter cattle in Alberta compared with the



prices of slaughter cattle in the US-Great Plains region<sup>13</sup> (CITT, 1993). Any one of these factors or more likely, some combination of them has contributed to Alberta's success in the export of live cattle.

The number of live cattle exports to the US from Alberta could drastically decline in 1996 and in years to follow. In 1995, there were approximately 2 million cattle available to packers, including those exported to the US. Alberta packers expect to slaughter approximately 3 million cattle in the near future. Given current production levels, this leaves a shortage of approximately 1 million cattle. Therefore, there is a need for a major increase in cattle production in Alberta in the short term. Such an increase is unlikely given the rising cost of feed grain in North America and the possible liquidation of livestock inventories (Canfax, May 1996). Another possible alternative for beef packers would be to purchase their slaughter cattle from other Western provinces, Ontario or the United States. There is the potential for approximately 300,000 slaughter cattle to be made available from the other Western provinces and Ontario (Agriculture and Agri-Food Canada, 1995). The remainder must be imported from the US. If live cattle are raised in the US and slaughtered in Canada what would be the origin of beef : Canada beef, Alberta beef or US beef? The Alberta beef industry must take into consideration this issue and find an answer for this question. If beef buyers from the rest of Canada, or from the rest of the world are not confident regarding the origin of Canadian or Alberta beef, it may have a negative impact on the image of both Canadian beef and Alberta beef.

#### 2.4.1.2 Beef exports

Table 4 shows the volume of international exports of beef from Alberta. Between 1986 and 1995, international exports of beef increased by 381% from 25,300 tonnes to 121,800 tonnes. In 1995, approximately 96% of Alberta beef exports went to the US. The remaining 4% went to Japan and other countries<sup>14</sup>. The Alberta Cattle Commission (ACC), the Canadian Beef Export Federation (CBEF), Alberta Agriculture and Alberta packers have worked closely to expand Canada's share of international beef exports. The high priority markets include: the Pacific Rim (mainly Japan and South Korea) , The United States and Mexico (CBEF, 1996 and personal conversation with Alberta packers, May 1996). Diversification of the export market for Alberta beef will contribute to the stability of beef production in Alberta in the near future. By identifying new markets and establishing early market share, Alberta's role in the global market for beef will be solidified.

### 2.4.2 Interprovincial trade

#### 2.4.2.1 Cattle

The interprovincial slaughter live cattle trade between Alberta and other Canadian provinces is insignificant. In 1986, only 50,000 of the cattle originated from Alberta were

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<sup>13</sup> The Great Plains include Kansas, Nebraska, North Dakota, South Dakota, Oklahoma and Texas.

<sup>14</sup> Mexico and Pacific Rim

slaughtered in Saskatchewan, Manitoba or British Columbia. Approximately 5,000 of the live cattle originated elsewhere in Canada were slaughtered in Alberta (Table 3). In comparison, approximately 22,400 live cattle originated from Alberta and were slaughtered outside of the province in 1995 (Agriculture and Agri-Food Canada, 1986-1995). Close to 61,000 cattle which originated from Manitoba, Saskatchewan or British Columbia were slaughtered in Alberta (Table 3). Thus, over the past ten years, Alberta has become increasingly adept at processing locally produced live cattle. In addition, increased capacity has allowed Alberta to process slaughter live cattle from other provinces.

#### **2.4.2.2 Beef**

The interprovincial market for Alberta beef is very significant. This market increased by 41% between 1986 and 1995 from 196,400 tonnes to 276,000 tonnes (Table 1). Québec has always constituted the bulk of the interprovincial market for Alberta. In 1986, exports to Québec represented 54% of Alberta's total interprovincial beef exports. In 1995, Québec accounted for approximately 50% of interprovincial exports. Exports to Québec increased by 30.5% from 106,000 tonnes in 1986 to 138,300 tonnes in 1995 (Table 4). Québec's beef purchases accounted for approximately 28% of Alberta's slaughter cattle and 35% of total Alberta exports in 1995 (interprovincial and international). Alberta beef exports to Québec represented an estimated value of \$386.4 million in 1995 (Alberta Agriculture, Food and Rural Development, 1996).

#### **2.4.3 Future**

There are no aggressive plans by the Alberta Cattle Commission (ACC), Alberta Agriculture or Alberta packers to attempt to increase interprovincial exports in the future. It is assumed that beef consumption will remain stable in Canada and that demand will be steady. Some packers are confident that an increase in slaughter capacity will allow them to ship more specific beef cuts to Québec such as inside rounds and chucks which are occasionally imported from the US. Shipping case ready beef products to Québec is not anticipated in the short term. However, Alberta packers would consider providing case ready product to Québec retailers and wholesalers if demand for these products developed.

In summary, packers and producers do not intend to ship more beef to Québec in the short run. They do however want to maintain their current market share in Québec. Currently, there is some concern regarding political issues such as the political debate over Québec independence that may affect the buying patterns of Québec beef purchasers (Personal conversation with Alberta packers and the ACC, May 1996). This issue is addressed in Chapter 5.

### **2.5 Summary**

Over a ten year period Alberta cattle and beef production has increased by more than 50%. Alberta is the largest cattle and beef producing province in Canada. The processing sector rationalized into larger scale operations. This sector is still expanding and the number of cattle slaughtered in Alberta is expected to significantly increase in the near future. This increase in

slaughter cattle output has forced Alberta packers to find new markets for Alberta beef. To date, the domestic market remains the main destination for Alberta beef. Québec is a crucial market for the Alberta beef industry particularly in grade “A” beef. Alberta beef packers want to maintain their market share in Québec. Although case ready beef presents numerous advantages to the packers, retailers and consumers, this technology is not widely used in Alberta. Alberta beef packers do not plan to ship case ready beef products in the short term. However, they are open to any requests from Québec retailers and wholesalers regarding this technology.

### **Chapter 3: QUÉBEC BEEF MARKET**

It is necessary to examine both the supply and demand sides to properly assess the large beef deficit in Québec. The first part of this chapter looks at the supply side. An historical overview of cattle and beef production is provided along with a description of the beef processing sector. The second part of the chapter looks at the demand side. This includes a description of the structure of the retail and restaurant sectors, Québec beef import markets and the consumption of meat in Québec.

#### **3.1 Cattle production (development and future)**

In Québec the number of slaughter live cattle marketed declined between 1986 and 1995. In 1986 Québec marketed 290,100 slaughter live cattle of which 80,300 were steers and heifers (Table 5). By 1995, marketing of slaughter live cattle declined 40% to 174,300 head; 68,700 were steers and heifers (a decline of 14%). However, the number of steers and heifers marketed has increased since 1990. The sales of steers and heifers increased 60% from 42,900 head in 1990 to 68,700 head in 1995 (Table 5). The drop in the number of slaughter live cattle marketed in Québec is mainly attributed to the decline in the inventory of dairy cows. Two main reasons may explain this decline:

- the level of milk fat consumption has substantially decreased,
- better genetics and farm management have increased the production of milk per cow (CITT, 1993).

In 1995 the cattle and calves sector in Québec was behind dairy, pork, chicken and crop sectors in terms of farm cash receipts. The dairy and pork sectors accounted for nearly half of total farm cash receipts in Québec, while the beef sector (cattle and calves) accounted for only 8.1% (Statistics Canada, 1995). However, the beef cow herd expanded between 1986 and 1995 (Table 2). There were 161,000 head in 1986 compared with 220,000 head in 1995 (an increase of 36%). This expansion of the beef cow herd contributed to the growth of steer and heifer production between 1990 and 1995 and should contribute to a further increase in the production of steers and heifers in the future.

#### Future

Québec Agriculture (MAPAQ) has adopted a strategic plan to triple in five years the

number of steers and heifers produced in Québec to a total of 175,000 head by 1999 (MAPAQ, 1995). This implies an increase of 180% in five years which is much greater than the increase between 1990 and 1995 (+ 60%). Representatives of Québec Agriculture are aware that this target will be difficult to reach considering the high degree of competitiveness in the North American cattle industry. However, the government plans to assist beef producers with improving farm management and genetics. In addition, the Farm Income Stabilization Program (ASRA), introduced in 1979 to protect producers against price fluctuations, should remain in place in the future. Nevertheless, even if the objective is reached (which is doubtful)<sup>15</sup>, it will not have a large effect on the beef trade between Québec and Alberta. The strategic plan implies an increase in steer and heifer production but does not target the number of steers and heifers slaughtered in Québec. Assuming that the number of steers and heifers slaughtered in Québec could double (see section 3.3) by 1999, this implies an increase of 50,000 steers and heifers slaughtered in Québec. This corresponds to 16,000 tonnes of beef<sup>16</sup>. If the population of Québec grows at the same rate until 1999 as it has the last four years and if per capita beef consumption remains steady, the demand for beef will increase by 10,000 tonnes (Statistic Canada, 1996 and MAPAQ, 1995). The impact would be negligible for Alberta beef exporters.

### **3.2 Beef production**

The total production of beef in Québec decreased 34% from 82,900 tonnes in 1986 to 54,600 tonnes in 1995 (Table 6)<sup>17</sup>. Beef production decreased by a smaller amount than the slaughter output due to higher average carcass weights (see section 3.3.)<sup>18</sup>. In 1995, the production of beef represented approximately 22,600 tonnes of manufacturing and grinding beef and 16,500 tonnes of high quality beef<sup>19</sup>. Québec is the largest beef deficit province in Canada. Consumption of beef greatly exceeds production; the total self sufficient ratio for all beef declined from 27.4% in 1986 to only 20.1% in 1995 (Table 6). The self sufficient ratio is 26% for manufacturing and grinding beef and only 15% for high quality beef. In summary, after a significant decline in beef production between 1986 and 1995, Québec is very reliant on beef imports from other provinces and countries.

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<sup>15</sup> In 1979 Québec Agriculture had a similar objective; triple in ten years the number of steers and heifers produced to a total of 166,000 head by 1990. This objective was never reached (Table 3 and Fédération des Producteurs de Bovins du Québec, 1990).

<sup>16</sup> Based on average weight carcass derived from steers and heifers of 719 pounds (Agriculture and Agri-Food Canada, 1995).

<sup>17</sup> Beef production derived from steers, heifers, dairy cows and bulls.

<sup>18</sup> In 1986 average carcass weight derived from cattle was 575 pounds. In 1995 average carcass weight had risen to 605 pounds (Agriculture and Agri-Food Canada, 1986-1995).

<sup>19</sup> Retail basis

### 3.3 Beef processing sector

In 1986, 321,000 cattle were slaughtered in Québec accounting for about 10% of the total number of cattle slaughtered in Canada. By 1995, the number of cattle slaughtered in Québec declined 37% to 202,400 head accounting for only 7.5% of the total number of cattle slaughtered in Canada (Table 5). This drop is mainly due to the decrease in the number of dairy cows produced and slaughtered in Québec. The number of steers and heifers slaughtered in Québec between 1986 and 1995 decreased by 42%. About one third of the steers and heifers fed in Québec are slaughtered in Ontario and in New-Brunswick (MAPAQ,1995). The proximity of Québec feedlots to Ontario and New Brunswick, along with higher demand from Ontario and New Brunswick packers for Québec steers and heifers may explain this movement of slaughter cattle.

There are five major packing plants in Québec which slaughter about 85% of the total slaughter cattle. They have an individual slaughter capacity of less than 50,000 cattle a year. Only one packing plant specializes in slaughtering steers and heifers. The beef packing sector has experienced some problems meeting the needs and the demand of large retail chains in Québec. The problem does not come from the quality of the beef as 86% of the steers and heifers slaughtered in 1995 graded at least “A”, compared with 89% in Alberta. The main problem is that packers cannot guarantee the retail chains and the wholesalers the large volume they require to operate. It forces the retail chains and the wholesalers to purchase their beef from larger suppliers outside of Québec. One study (Consortium,1995) revealed that Québec beef packers are often utilized as “convenience stores” by large retail chains and wholesalers. In other words, retail chains and wholesalers usually purchase beef from Québec packers when they run out of supply such as at the end of the week. This perception appears to be widely accepted among people from the beef industry (Personal conversation with Québec beef packers, June 1996). Even if the production of beef were to increase, it would not affect the role of Québec beef packers as residual beef suppliers.

There are several factors that affect the competitiveness of the beef packing sector in Québec. These are:

- large excess capacity for most of the packing plants; they are utilized at approximately 50 per cent of their capacity (on average) (MAPAQ, 1995),
- packing plants are not competitive due to a low slaughter volume (MAPAQ, 1994),
- packers have been slow to modernize their equipment and to become competitive in the wholesale and retail markets. (i.e. not enough boxing capacity) (MAPAQ, 1994 and Fédération des Producteurs de Bovins, 1996),
- research and development concerning new beef cuts and new products are almost nonexistent (MAPAQ, 1994),
- hourly wages are higher in Québec compared with other Canadian provinces or the US (MAPAQ 1994),
- low volumes of value-added beef products (Fédération des Producteurs de Bovins, 1996 and MAPAQ, 1994).

Thus, the presence of the beef packers in Québec is necessary and desirable to beef buyers but due to the weaknesses of this sector and the strong competition from Alberta, Ontario and US packers, their presence in the beef market in Québec is limited.

### **3.4 Structure of the retail and restaurant sectors**

#### **3.4.1 Retail sector**

The organizational structure of the retail trade sector is unique to Québec as compared with other provinces in Canada. In 1994 there were 10,667 food stores in Québec (including convenience stores) compared with 7,467 stores in Ontario. Among them, 23% were incorporated and owned by the food retail chains, 60.3% were independent and in voluntary association with a food retail chain. Finally 16.7% were unaffiliated and independent (Anonymous, Feb. 1995). In comparison, 53.2% of the food stores in Canada (including Québec) were incorporated; 37% were independent and in voluntary association with a retail chain. Only 9.3% were unaffiliated and independent. For Québec, these numbers indicate that food retail chains potentially have control of 83.3% of the food retail stores. However they have total control on only 23% of the food retail stores.

Two major retail chains (Métro-Richelieu and Provigo) control a large part of the retail beef market in Québec. They have their own distribution center and they deal directly with beef packers<sup>20</sup>. The other retail chains do not have their own distribution center and therefore must purchase their beef from one of the three main wholesalers in Québec (Lauzon, Chatel or Québec Packers). The unique characteristic of the retail sector (i.e. independent owner-operated stores) allows in theory for a great deal of autonomy at the store level. Store owners can purchase through the central distribution center, or they can purchase directly from a wholesaler (Peat Marwick, 1989). Most store owners purchase their beef through their distribution center since a price discount mechanism is in place.

Beef purchased from Alberta by Québec wholesalers and retailers-wholesalers is mainly distributed in Québec, although one retail chain distributes beef to its affiliate stores in Ontario and another retail chain distributes beef to its affiliate stores in New-Brunswick (quantity is unknown). In summary, the beef trade sector is very concentrated in Québec; a large part of the volume is handled by five buyers (three wholesalers and two wholesalers - retailers).

#### Case ready

There are currently two retail chains utilizing case ready beef products in Québec. Retailers utilizing case ready products purchase 100% of their beef in case ready packages. For one retail chain, the introduction of case ready is on a trial basis and there is no information available about the results of the program. In both cases, case ready products are processed by central processors. Beef packers are not yet involved in the case ready program (Personal

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<sup>20</sup> They no longer use the independent wholesalers.

conversation with retailers, June 1996). Thus, the case ready technology is not widely established in Québec. However there is a strong interest from some retailers and the use of case ready beef should increase in the future. The qualitative section of chapter 5 will provide more details concerning this issue.

### **3.4.2 Restaurant sector**

The restaurant sector is in a period of growth in Québec. In 1994 there were 9,455 restaurants in Québec, an increase of 10% compared with 1991 (MAPAQ, 1995). Based on cash receipts for 1991 to 1994, on average, the restaurant sector accounted for 20% of food sales in Québec while the retail sector accounted for 80% per cent of food sales. However, it is estimated that 70% of beef is sold at the retail level whereas 30% is sold in the Hotel-Restaurant-Institution (HRI) sector (MAPAQ, 1993). Two major purveyors control the HRI sector for beef in Québec: Distal (Gordon foods Service) and Dellixio (owned by Provigo). However, there are also many small purveyors who supply the HRI sector. The beef distribution is complex as there are few restaurant chains in Québec which specialize in beef (excluding fast food chains). Several individual restaurants serve high quality beef but most of them are independently owned and operated. The majority of the restaurateurs do trade with the purveyors. Only a few restaurateurs do trade directly with packers (Personal conversation with purveyors and restaurateurs, June 1996).

## **3.5 Québec beef imports market**

### **3.5.1 International imports**

Between 1986 and 1994, Québec's international imports of beef increased each year (Table 7). Imports increased by 70% between 1986 and 1990, from 15,000 tonnes to 25,500 tonnes. The bulk of the increase occurred between 1990 and 1994. Imports increased by 169% from 25,500 tonnes in 1990 to 68,700 tonnes in 1994. However, in 1995 international imports dropped by 38% from 68,700 tonnes to 42,800 tonnes. This decline is attributed to lower beef imports from Australia and the US. For the whole period (1986 to 1994), international imports increased by 358%. Québec's largest international supplier of beef in 1994 was the US followed by Australia and New Zealand, while in 1995 New Zealand was the largest international supplier of beef followed by Australia and the US (MAPAQ, 1995)<sup>21</sup>.

In 1994, Québec imported 28,800 tonnes of beef from the US representing 42% of all international beef imports to Québec. Imported beef from the US represented about 11% of total beef consumption in Québec. The share of Québec's imports of beef held by the US increased sharply between 1986 and 1994, from 2.6 thousand tonnes to 28.8 thousand tonnes (an increase

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<sup>21</sup> Approximately 95% of all international imports were boneless in 1994.

of about 1,000%)(Table 7)<sup>22</sup>. In 1994 box beef accounted for 100% of the beef imported from the US<sup>23</sup>. Beef imports from the US are either “Select” or “Choice” for the HRI sector (high quality beef); “Select” or “Standard” for the retail sector and ungraded beef for the further processing sector. In 1994 10% of all imports from US were rib and loin cuts (HRI market), 68% were chucks and rounds (retail market), and about 22% were destined for the further processing sector (processing cuts) (MAPAQ, 1995).

Imports of beef from other sources (mainly Australia and New Zealand) increased substantially between 1986 and 1995. Imports increased 160% from 12.4 thousand tonnes to 32.2 thousand tonnes. Grass fed beef from Oceania is mainly frozen and is utilized by the further processing sector<sup>24</sup> for HRI and the grocery retail delicatessen sectors. Imports from offshore should remain steady in the short run since under WTO (World Trade Organization) rules, a tariff rate quota level of 76,409 tonnes has been applied to beef buyers using imported beef from non-NAFTA countries. Australia and New Zealand supply 71,409 tonnes and the European Union supply the remaining 5,000 tonnes (Anonymous, Jan.1996). If imports are greater than 76,409 tonnes, there is a tariff of 31% which should decline to 26.5% by the year 2,000<sup>25</sup> (Beef Industry Trade and Development Committee, 1995).

### **3.5.2 Interprovincial imports**

Alberta accounts for a large portion of the beef interprovincial imports into Québec. In 1986 beef imports from Alberta accounted for 46% of total interprovincial beef imports to Québec (Table 7). The share of Alberta’s imports of beef to Québec largely increased between 1986 and 1995. In 1995, Alberta held approximately 74% of total interprovincial beef imports to Québec. Although beef imports from Alberta to Québec have fluctuated between 1986 and 1995, there is an upward trend. Between 1986 and 1990, the annual import average was 120,455 tonnes, while between 1991 and 1995, the annual import average was 134,379 tonnes (an increase of nearly 12%). However, the major change occurred in trade with other provinces. Beef imports from Ontario, Saskatchewan and Manitoba decreased 70% from 124,500 tonnes in 1986 to 49,400 tonnes in 1994. The rationalisation in the beef-packing industry in Western Canada and Ontario is responsible for this major shift in the interprovincial beef trade. In 1994 and 1995, virtually all interprovincial beef imports to Québec (excluding Alberta) were from Ontario (personal conversation with Alberta packers and Québec beef buyers).

#### Trade barriers

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<sup>22</sup> US imports significantly declined in 1995 to 10,600 tonnes

<sup>23</sup> Beef from the US is mainly destined for the fresh market.

<sup>24</sup> Utilized for ground beef, sausage, pastrami.

<sup>25</sup> There is also provision for supplementary import quota.



Although regulations regarding road transport are not harmonized between Québec and the western provinces, the beef trade between these provinces is not affected (CITT, 1993). There are no trade barriers ( either tariffs or non tariffs barriers) between Québec and Alberta regarding beef trade. There are no requirements for Québec retailers to indicate on the individual packages the grade or the origin of the beef. The only requirement is to mention Canada grade “A” or USDA “Select” in the flyers when retailers feature beef. However, this does not affect the beef trade, and Québec remains an open market for beef imported from Alberta or elsewhere in Canada.

### Characteristics

Approximately 80% of the beef purchased from Alberta and Ontario is boxed beef, while beef carcass accounts for about 20%. (Personal conversation with Alberta packers and Québec buyers, May and June 1996).The trend is toward box beef (see chapter 5) although there is still a small market for beef carcasses. Alberta and Ontario mainly shipped fresh beef from steers graded “A” for the retail market and steers graded “AA” and “AAA” for the HRI market. Although there are no data pertaining to this matter, there are a certain amount of beef cows (carcass or box beef) which are shipped from Alberta to Québec and distributed to restaurants and utilized for beef cuts or ground beef. The Québec market is essential for Alberta since a large part of Alberta’s carcasses graded “A” are sold in Québec as high quality beef. Québec is the main market which purchases a large quantity of beef grade “A” beef, while the other markets in Canada, the United States and in Asia have a strong preference for more marbled beef such as grade “AAA”<sup>26</sup> (personal conversation with Alberta packers, May 1996).

## **3.6 Consumption of meat in Québec**

### **3.6.1 Beef**

Table 8 gives the total and per capita consumption of beef, pork and chicken in Canada and Québec between 1986 and 1995. In Québec total consumption of beef followed the trend of steady decline observed in Canada between 1986 and 1995. Consumption of beef declined 19.3% from 46.2 kg in 1986 to 37.3 kg in 1995. Consumption of beef in Québec is traditionally about 20% higher than in the rest of Canada. Consumption stabilized at 37.3 kg per person in 1994 and 1995. Consumption of high quality beef in Québec is estimated at 20.8 kg per capita, while consumption of grinding and manufacturing beef is estimated to 16.5 kg per capita (MAPAQ, 1995). These estimations are slightly different compared with Canada where on average people consume 15.1 kg of high quality beef and 16.3 kg of manufacturing and grinding beef (Beef Industry Trade and Development Committee, 1995). In comparison, consumption of chicken increased substantially between 1986 and 1995 from 22.1 kg to 27.4 kg (up to 245), while the consumption of pork remained steady at around 28 kg per capita. Total consumption of meat slightly declined from 96.1 kg in 1986 to 92.9 kg in 1995 (a decrease of 3.3%).

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<sup>26</sup> However California and BC markets also have a preference for lean beef (Thomas, August 1995 and Zafiriou, 1989).

The following section of the paper briefly describes the situation in the pork and the chicken sectors in Québec based on the current literature. These are competing meats to beef.

### **3.6.2 Pork**

Consumption of pork has slightly increased since 1990, particularly in the HRI sector due to effective merchandising methods (Infras, 1992). A recent study from Québec Agriculture (MAPAQ, 1996) mentioned the main factors that have contributed to the increase in pork consumption:

- introduction of new pork cuts and development of deli meats,
- new products such as ham with a reduced content of salt,
- more people have their breakfast in restaurants (ham, bacon),
- increase in advertising and promotional activities from Québec Pork Marketing Board (FPBQ) and Québec Agriculture (MAPAQ),
- training program for butchers in the retail sector and chefs in the HRI sector (MAPAQ, 1996). Despite these advancements, pork is still less popular than beef in the HRI sector. The HRI sector accounts for 15% of total pork consumption and the retail sector accounts for 85%.

### **3.6.3 Chicken**

Several factors have contributed to the substantial increase in chicken consumption over the past ten years. These are:

- diversification of chicken products offered in the market,
- introduction of products in the fast food sector,
- perceived health concerns tend to favor chicken at the expense of red meats (pork, beef),
- counter ready chicken is used by some retail chains,
- the consumption of chicken in the HRI sector has increased (MAPAQ, 1995).

The HRI sector accounts for 40 % of total chicken consumption and the retail sector accounts for 60%. In summary, chicken is considered the main competitor of beef, especially in the HRI sector. High promotional and advertising budgets for chicken and pork will constitute serious competition to levels of beef consumption in Québec in the future (Personal conversation with Québec Agriculture official, July 1996)<sup>27</sup>.

## **3.7 Summary**

This chapter examined the characteristics of the Québec beef market. Cattle and beef production has declined over the last ten years. In addition, the Québec beef processing sector is not able to guarantee an adequate supply of beef to Québec beef buyers. The composition of retail stores is unique in Canada since less than 25% of the food stores are incorporated and owned by

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<sup>27</sup> The budgets regarding pork and chicken promotion in Québec are confidential and exceed any beef promotion.

the food retail chains. Beef imports from the US have substantially increased over the last ten years at the expense of Saskatchewan, Manitoba and Ontario. However, Alberta remains the major supplier of high quality beef to Québec. Finally, the consumption of meat in Québec has remained relatively stable over the last few years. However, the pork and chicken industries have made tremendous efforts to promote their products in Québec. Pork and chicken will constitute serious competitors to the beef industry in the future.

The Alberta beef industry needs to evaluate the demand for beef in Québec in order to remain competitive. This demand may be evaluated by determining Québec beef buyers' perceptions regarding imported beef. The next chapter describes the survey methodology used to evaluate beef perceptions in Québec among wholesalers and retailers, and restaurateurs serving high quality beef.

## **Chapter 4: SURVEY METHODOLOGY**

This chapter presents the details of the survey methodology. This includes a discussion on the relevance of the survey, how the respondents were chosen and a description of the respondents. The marketing and statistical tools utilized to prepare the questionnaires and analyse the results are described along with the potential usefulness of the results to the Alberta beef industry.

In Chapter 2, it was noted that Alberta shipped 138,300 tonnes of beef to Québec in 1995 for a total value of \$386.4 million (section 2.4.2.2). Although useful, these secondary data do not provide information about the level of knowledge and opinions that Québec beef purchasers have toward imported beef and local beef. Furthermore these data fail to indicate to the Alberta beef industry how it might further increase its market share in the Québec beef market. Kohls and Uhl (p. 244, 1990) observed that “ food market development refers to a wide range of marketing activities designed to enhance the value of food products for consumers”. These marketing activities include: attributes of the product, new product development and promotional activities. The authors stressed that the purpose of market development is to increase purchaser satisfaction as well as firm or industry profits. The primary data collected from the survey provide information on the position of Québec beef purchasers regarding beef attributes, promotional activities, new product development, political issues that may affect the beef trade between Alberta and Québec and the future of the Québec beef market. This information is essential to the Alberta beef industry in order to maintain or increase its market share in the Québec beef market.

The data were collected using both quantitative and qualitative questions. The quantitative questions were close ended questions and all possible answers were prespecified. This type of question was used because it is easy to interpret and results are easy to tabulate (Kotler, 1991). The purpose of the qualitative questions was to complement the information gathered from the quantitative questions. The qualitative questions were open ended questions which allowed respondents to give variable and personalized answers. Open ended questions reveal more information because respondents are not limited to choosing between a set of prespecified

answers (Kotler, 1991).

The survey consisted of two stages. The first stage consisted of personal interviews with the following industry and government representatives in Alberta:

- 4 beef packers: Cargill Foods, IBP-Lakeside Packers, X-L Beef and Burns Meats,
- Alberta Agriculture,
- Agriculture and Agri-Food Canada,
- Alberta Cattle Commission.

Interviews conducted with representatives of these organizations were based on open ended questions. The goal of the interviews was to obtain background information on the beef trade between Québec and Alberta, and with other beef suppliers such as Ontario and the US. The information gathered during the interviews supplemented by literature research were used to design a questionnaire for beef buyers in Québec.

The second stage of the survey consisted of formal interviews in the Montréal and Québec city area in order to collect quantitative and qualitative data from the wholesale, retail and restaurant sectors. The wholesalers, retailers and purveyors were chosen with the assistance of Alberta beef packers and Alberta Agriculture officials. The choice of the respondents for the restaurant sector was assisted by the purveyors and other people involved in the beef industry in Québec. In addition, the CAA (Canadian Automobile Association) Directory (CAA and Société des Alcools du Québec, 1995 and 1996) was utilized to determine some white table cloth restaurants. The survey involved 36 personal interviews in Québec; those interviewed included:

- 3 wholesalers,
- 2 retailers-wholesalers,
- 2 retailers,
- 2 purveyors<sup>28</sup>,
- 20 restaurateurs (chef or manager),
- 2 government officials from Québec Agriculture,
- 2 representatives from Québec Beef Marketing Board (FBPQ),
- 2 beef packers,
- 1 representative from Beef Information Center.

The wholesalers, the wholesalers-retailers, the retailers and the purveyors constitute the main beef purchasers in Québec for the retail and HRI sectors. Restaurants were selected based on the following criteria:

- high quality beef served in the restaurant (fast food restaurants have been excluded) as a speciality or as part of their regular menu,
- restaurants recognized by the CAA Directory and/or having a strong influence among consumers and among other restaurateurs,
- restaurateurs who care about the quality of their raw material.

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<sup>28</sup> Purveyors carry on the same functions as the wholesalers. However purveyors mainly trade with the HRI sector, while wholesalers trade with the retail sector.

Two restaurants were located in a hotel, one restaurant was part of a restaurant chain and the others were independent. The questionnaire was standard for all respondents from the wholesale and retail sector. A separate questionnaire was designed for purveyors and restaurateurs. The language of the survey was mainly French although some respondents chose to respond in English.

Both questionnaires included two parts; quantitative and qualitative questions<sup>29</sup>. For the quantitative questions, respondents gave ratings for beef purchased from Canada, as well as imported beef. There were questions concerning the quality of the beef, merchandising and promotional activities in the province or country. Alberta, US, Ontario, and Québec beef suppliers were considered for the retailer and the wholesaler questionnaire, while only Alberta and the US were considered for the purveyor and the restaurateur questionnaire.

A seven level semantic differential scale with bipolar adjectives was utilized in the quantitative questions to evaluate the behavior of Québec beef buyers. This method was previously used by Nagashima (1970), Papadopoulos (1994) and Kim et al. (1996). According to Churchill (p.432, 1991), this technique “allows respondents to express the intensity of their feelings toward company product, packaging, advertisement or whatever”. He considers this technique as being “the most valuable research tool when combined with proper item analysis techniques”. The bipolar adjectives were randomly rotated to the left and right to prevent bias and response routinisation. The mean score of each attribute for each country or province of origin was calculated (Papadopoulos, 1994). This gives an overall rating of country-provinces by the Québec beef buyers. Finally, an ANOVA test (analysis of variance) was used to determine significant differences among the ratings of attributes for beef from different origins (Kim et al., 1996 and Berenson and Levine, 1996). Product attributes and promotional activities were chosen since they constitute the main marketing variables which influence the buyer’s purchasing decision. (Green et al., 1988 and Kotler, 1991). The product attribute questions illustrate for the Alberta beef industry how Québec beef buyers perceive Alberta’s beef products based on the main attributes of beef. This also indicates how beef buyers perceive the beef products of the competitors. The promotional activity questions suggest to the Alberta beef industry how Québec beef buyers perceive its assistance and promotions compared with the competitors. The information obtained from these two types of questions may be useful to the Alberta beef industry to improve its beef products, service and promotions in Québec.

The Delphi technique was used for the qualitative part of the survey which included open ended questions. Delphi is defined as a method for structuring a group communication process (Nowak, 1987). According to Nowak (p.20, 1987), this technique “offers a researcher an opportunity of conducting controlled and structured utilization of expert’s opinions, without requiring that participants meet face to face”. In addition, he states that Delphi technique allows “respondents to remain anonymous and prevents domination by individuals”. The qualitative section asked respondents to provide their opinions regarding five issues: main beef attributes

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<sup>29</sup> An English version of both questionnaires is presented in Appendix (Figure 1 and 2).

influencing beef purchasers in Québec, markets and distribution of beef in Québec, origin of beef and branding, political issues and the future of the Québec beef market. The opinions gathered from the respondents may be used to predict the evolution of a specific market (such as the Québec beef market) (Berenson and Levine, 1996).

The quantitative and qualitative parts of the survey were based on a previous study (Kim et al., 1996) of the Korean beef market. Questions were developed by the interviewer, and were adapted so that they apply to the Québec market. Many questions were suggested by experts from the beef industry in Québec and in Alberta and many professors at the University of Alberta (Rural Economy and Agricultural, Food and Nutritional Science Departments). Both questionnaires were carefully translated to French by the interviewer using specialized literature to assist with the translation.

## **Chapter 5: SURVEY RESULTS AND ANALYSIS**

This chapter presents the results of the survey for both the quantitative and the qualitative sections. For each section, the results of the survey of the retailers and the wholesalers are presented, followed by the results of the survey of the restaurateurs. The surveys were conducted in June 1996.

### **5.1 Quantitative analysis**

Quantitative analysis was based on the results from the semantic scale for each group: retailers and wholesalers, and restaurateurs. Only the most relevant results are commented on in detail in this analysis. A comparison of the results to previous studies on the Québec beef market, as well as comments supplied by industry and government experts from Québec and Alberta are provided. Respondents in each case were identified as the main beef buyers for the wholesale and retail sectors and decision makers for beef purchasing in the restaurant sector. The semantic scale used in the quantitative questionnaires ranged from -3 to 3. In each case, -3 denotes the least desirable characteristic, and 3 represents the most desirable characteristic. The quantitative section includes two parts: product quality and promotional activity. For each part, the results of the quantitative section for the retailers and the wholesalers are presented, followed by the results of the quantitative section for the restaurateurs.

#### **5.1.1 Product quality**

*- Retailers and wholesalers, and restaurateurs*

The evaluation of product quality includes twelve characteristics for the wholesalers and the retailers, and nine characteristics for the restaurateurs. From these, three were chosen from each group based on the qualitative section. In the first qualitative question, respondents were asked to identify the characteristics they consider before making a beef purchasing decision (Figure 1 and 2, Supplemental question # 1). Wholesalers and retailers mentioned marbling, price,

and meat color as important beef attributes. Restaurateurs mentioned marbling, aging and price as important beef attributes. The results of the survey concerning these characteristics will be commented on, followed by a brief description of the other results.

#### *a) Retailers and wholesalers*

##### 5.1.1.1 Marbling

According to the qualitative survey results, marbling is among the most important criteria for respondents purchasing beef. About 70% of respondents mentioned this criterion. Figure 3 and Table 9 show that the respondents rated marbling to be highest on Alberta beef at a mean score of 1.14, followed by the US (1.00), Ontario (-0.17) and Québec (-0.33). These results must be carefully interpreted. In the questionnaire, abundant marbling was considered as the most desirable attribute, while trace marbling was considered to be the least desirable attribute. Although the differences between mean scores are not statistically significant, these differences may have some economic significance<sup>30</sup>. The results indicate that beef buyers considered beef from Alberta and the US to be fatter (more marbling) and beef from Québec and Ontario to be leaner (less marbling). A recent study (Consortium, 1995) mentions that beef from Québec is leaner compared with beef from other origins. Results do not indicate that beef from Alberta is too fat; wholesalers and retailers did not complain about the fat content of Alberta beef. They are satisfied with the degree of marbling of Alberta beef.

In Québec, in the retail market consumers have a preference for lean beef. Usually, “A” marbling or US “Select” corresponds to the needs of the consumers. This important characteristic of the Québec beef market is confirmed by a consumer study concerning beef in Québec (Infras, 1992). The study mentions that consumers still consider fat content to be a negative factor in the consumption of beef, although they do consider beef to be leaner than it was five years ago. In addition, it is mentioned that 40% of the food purchasers in Québec are concerned with cholesterol. Another study (Foug, 1990) mentions that Québec consumers want lean beef with little or no marbling. Although marbling is sometimes associated with tenderness; tenderness is not a crucial factor at the retail level in the Québec beef market. The majority of the beef consumed in Québec is either from the US or from Alberta. This implies that aging is sufficient to bring tenderness in beef. In addition, the style of cooking of Québécois involves a lot of sauces and stewing. This limits the importance of tenderness at the time of purchase (Personal conversation with Québec beef buyers and Thomas, August 1995).

##### 5.1.1.2 Price

The qualitative survey shows that price is an important characteristic when buyers purchase beef. About 50% of respondents mentioned this attribute. Figure 3 and Table 9 show that price was considered to be highest for Alberta beef (-0.17), while Ontario beef is considered to be the cheapest (1.20). The US and Québec are ranked in the middle at the same level (1.0). The differences between mean scores are not statistically significant, however they may have an

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<sup>30</sup> In a recent study, McCloskey and Ziliak (1996) provide information regarding statistical significance and economic significance.

economic significance. This supports the perception that Alberta beef may be more expensive than beef from other origins. Alberta's rank concerning beef price has not changed since 1990. The Foug study (1990) proposed that consumers consider Alberta beef to be more expensive than beef from other origins. Also, in the same study it is mentioned that beef buyers wanted to see lower beef prices from Alberta.

The Montréal wholesale price used to be the main price reference for beef in Canada (Agricultural Economics Research Council of Canada, 1977). Although the Montréal price is still the most frequently used in Canada, the conditions under which this price is established have changed in the last twenty years (CITT, 1993). There is open trade in beef between the US and Canada. This means that the Montréal wholesale price is largely influenced by US prices. In addition, the Montréal price is influenced by Ontario prices, beef supply in Alberta and in Ontario, and beef demand in Québec (Personal conversation with Québec Beef Marketing Board, Jan. 1996). Lower transportation costs between Québec and Ontario, when compared with transportation costs from Alberta and the US may explain lower beef prices for both Ontario and Québec beef sold in Québec. Beef packing plants in the Mid-Western states are slightly closer to Québec than Alberta<sup>31</sup>. However US beef packing plants located in Colorado and Washington state are not closer to Québec than Alberta. This implies that the cost of transport is not the main factor in justifying lower US beef prices. Differences in production costs between Canadian beef packing plants and US beef packing plants may be a more important factor (CITT, 1993). However, considering that some Alberta plants will soon operate as intensively as the large US plants, price differences between US and Alberta should narrow in the future.

#### 5.1.1.3 Meat color

The meat color was also considered to be a main attribute of beef. About 30% of respondents considered this attribute important (qualitative question # 1). Respondents perceived Alberta beef to be the most desirable in terms of meat color (2.43), followed by the US (1.86), Québec (1.17) and Ontario (0.83)<sup>32</sup> (Figure 3 and Table 9). The bright red color of Alberta beef corresponds to the needs of the consumers in Québec at the retail level. Among visual references that help consumers to identify good quality of beef, the bright red color is mentioned in the Foug study (1990) as well as Infrás (1992). In the latter study, consumers stated that “the redder beef is, the more attractive it is”. The importance of this attribute in Québec implies that Alberta beef exporters must choose an adequate method of shipping case ready beef to Québec. They must ensure that the bright red color of beef remains intact until it reaches the consumer.

#### 5.1.1.4 Other attributes

Other attributes were not mentioned as being the most important in the qualitative part of the survey, but they are taken into consideration when buyers order beef. The differences between aging and fat trim mean scores are statistically significant. Aging is rated to be most adequate for

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<sup>31</sup> Nebraska, Kansas and Texas.

<sup>32</sup> Differences between Alberta and Ontario mean scores are statistically significant.



Alberta beef (2.33), followed by the US (1.67). Aging of Ontario and Québec beef is viewed to be less adequate (0.20)<sup>33</sup>. Beef from Alberta and the US is aged during transport (3-4 days), which is not the case for Ontario and Québec. This may explain the higher scores for Alberta and the US in regards to adequate aging. Fat trim is perceived to be most adequate for Alberta beef (2.00), followed closely by Québec (1.83), Ontario (0.83), and the US (-0.43) (Figure 4 and Table 9)<sup>34</sup>.

The other attributes are not statistically significantly different, although they may have an economic significance. Alberta obtained the highest score for overall beef quality (2.71) followed by the US (1.71). Québec and Ontario rated at the same level (1.0) (Table 9 and Figure 4). The fat color of Alberta beef was perceived to be white (2.29), but the fat color of beef from other origins was perceived to be between white and yellow (0.57 and 0.50). The choice of feeding may explain differences in fat color between different beef suppliers. Cattle feeding in Alberta is reliant on barley, while in Eastern Canada and the US corn is the predominant choice of feed (CITT, 1993). Finally, Alberta beef was ranked the highest in terms of tenderness, flavour, sanitary rules and product packaging, The US was second, Québec and Ontario were ranked the lowest.

Marbling, price and meat color are considered major attributes of beef by retailers and wholesalers. These attributes are also considered essential by Québec beef consumers (Consortium, 1995). Alberta is perceived to be the best beef supplier in terms of meat color and marbling even though Québec and Ontario beef are leaner. However, Alberta beef is rated as the most expensive compared with beef from other origins. Alberta has the highest score for all other attributes; overall beef quality, tenderness, aging, fat color, fat trim, flavour, sanitary rules and product packaging. With the exception of fat trim, the US is second and Ontario and Québec are rated last. These conclusions should be used with caution since many of the differences between mean scores are not statistically significant although they may have some economic significance.

## *b) Restaurateurs*

### 5.1.1.5 Marbling

Marbling was considered to be an important attribute of beef by more than 60% of restaurateurs in the higher quality beef market. Figure 5 and Table 10 show that US beef is perceived to be more abundant in marbling (1.40) than Alberta beef (1.05)<sup>35</sup>. The needs of restaurateurs are different compared to retailers in terms of marbling. The restaurateurs prefer more marbling usually “AAA” or “AA” (“Choice” or “Select” for the US). This is the opposite of

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<sup>33</sup> Differences between Alberta and Québec mean scores and between Alberta and Ontario mean scores are statistically significant.

<sup>34</sup> Differences between Alberta and the US mean scores and between the US and Québec mean scores are statistically significant.

<sup>35</sup> Although the differences between mean scores are not statistically significant, they may have some economic significance.

the retailers' needs as consumers cannot see the intramuscular fat when beef is cooked in a restaurant. Thus, Québec consumers appear to appreciate the consumption of beef in restaurants without knowing that they are eating beef with more abundant marbling.

Restaurateurs stated that it is sometimes difficult to purchase "AAA" grade from Alberta during certain periods of the year, particularly in winter. This forces them to purchase US beef. They would prefer that "AAA" grade be available all year which is the case for US beef. In addition, some restaurateurs purchase more US beef than Alberta beef, or only US beef because they consider it more appropriate for their customers in terms of marbling.

#### 5.1.1.6 Aging

Aging was another attribute frequently mentioned by the respondents (about 40%). Table 10 and Figure 5 show that Alberta beef is considered the most adequate in terms of aging (2.14), and the US is considered to be less adequate (1.16)<sup>36</sup>. Usually the restaurateurs receive beef from the purveyors at about 14 days aged; most of them will further age their beef until 21 days and sometimes up to 28 days for maximum tenderness. Some restaurateurs will not further age their beef due to insufficient fridge capacity. For those restaurateurs, aging at the time of delivery is crucial. In contrast, some restaurateurs utilize a special oven to age their beef at a low temperature. Therefore they prefer to receive their beef at about 10 days and age it themselves. Regardless, aging remains important in beef purchasing, since newer aging technology is not yet widely used by the restaurateurs.

#### 5.1.1.7 Price

Price was also an important beef attribute considered by the respondents (about 40%). Alberta beef was perceived to be the most expensive (-1.05) while US beef was viewed as the cheapest (0.55) (Figure 5 and Table 10)<sup>37</sup>. A large majority of restaurateurs consider Alberta beef to be of superior quality compared to US beef, therefore they are willing to pay higher prices for the product. Nevertheless, there are three reasons that force restaurateurs to purchase US beef occasionally; 1. some restaurateurs stated that US beef prices fluctuate less when compared to Alberta beef prices, 2. restaurateurs can pass a "reasonable" price increase to the consumer (consumer is willing to pay higher price for high quality beef); however when the price for some cuts reaches an upper limit (\$ 20- \$ 22 a kg), it becomes more difficult to pass the increase to the consumer, 3. competition among restaurants for a "lunch special" at a low price is very strong (particularly in Québec city). To remain competitive, restaurateurs must reduce the beef portions or utilise beef from other sources, mainly from the US.

#### 5.1.1.8 Other attributes

Overall beef quality was viewed to be the highest for Alberta beef (2.32) and the lowest

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<sup>36</sup> Although the differences between mean scores are not statistically significant, they may have some economic significance.

<sup>37</sup> Differences between mean scores are statistically significant.

for US beef (0.60). The fat color of Alberta beef was perceived to be white (2.05), whereas the fat color of US beef was perceived to be yellow (-0.26). Finally, tenderness, fat trim, flavour and yield were rated higher for Alberta than the US. All of the differences between mean scores are statistically significant with the exception of the yield (Figure 6 and Table 10).

There is a clear message from most respondents that beef from Alberta is perceived to be superior in terms of quality when compared with US beef. There are six attributes where Alberta obtained statistically significant higher scores than US beef. These attributes are: aging, fat color, fat trim, overall beef quality, tenderness and flavour. However, the restaurateurs consider US beef more adequate in terms of price and marbling although marbling is not statistically significantly different.

### **5.1.2 Promotional activity**

#### *- Retailers, wholesalers and restaurateurs*

Alberta beef packers and Québec beef buyers have built a solid relationship through the years. The results of the survey concerning service and assistance by the beef packers supports that assumption (Table 9)<sup>38</sup>. Alberta obtained the highest score (2.67), followed by Québec (2.00), Ontario and the US (1.00). However, the service and assistance supplied by packers may be extended to promotion and advertising. Wholesalers, retailers and the restaurateurs were asked whether they were highly aware or unaware of promotions conducted by the beef industry and the government for each country or province of origin.

#### 5.1.2.1 Awareness and effectiveness of promotion

##### a) Retailers and wholesalers

The beef buyers were aware of promotions carried out by the Alberta beef industry and the government. In comparison, they were unaware of beef promotions by the US, Québec and Ontario. Figure 7 and Table 9 show that the mean score for promotion by the beef industry is highest in Alberta (1.43), while the others are negative; Québec (-0.33), the US (-1.00) and Ontario (-1.33)<sup>39</sup>. The mean score is also the highest for Alberta regarding promotion by the government (0.43), followed by Ontario (-1.00), the US (-1.14) and Québec (-1.33)<sup>40</sup>. Scores are negative for all beef suppliers concerning the effectiveness of promotion by the industry: Alberta (-0.71), Ontario and Québec (-1.67) and the US (-2.80). Effectiveness of promotion by the government shows similar results, although the differences between mean scores are statistically significant.

Beef buyers were aware of some promotional activities by Alberta. They mentioned the visits of Alberta packers on a regular basis in Québec. The Alberta Cattle Commission (ACC)

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<sup>38</sup> Differences between mean scores are not statistically significant.

<sup>39</sup> Differences between mean scores are not statistically significant.

<sup>40</sup> Differences between mean scores are not statistically significant.

conducts a trade mission in Québec every year in collaboration with Alberta Agriculture. The ACC distributes promotional material in French such as pamphlets and posters. In the past, there has been promotions funded by Alberta Agriculture. To date, the ACC is the only organisation from Alberta providing funds for beef promotion in Québec. However, Québec retailers stated that funds are not sufficient, and the demand for promotions largely exceeds what the ACC can financially support. Some beef buyers also mentioned that the responsibility of promoting Alberta beef in Québec falls to the beef producers and not to retailers or wholesalers. They considered promotions from Alberta (industry and government) to be ineffective. Buyers mentioned that promotions do help to maintain good contacts with the industry and the government, but they do not believe that it helps to increase their sales of beef.

Ontario, the US and Québec do not participate in any form of beef promotions in Québec. The Québec Beef Marketing Board and Québec Agriculture do not spend money on promotions or advertising since the volume of beef production in Québec does not justify it (Personal conversations with Québec Beef Marketing Board and Québec Agriculture, June 1996). The US packers, in the view of the respondents, do not have a strong presence in Québec. They do not have an aggressive marketing strategy for beef in Québec.

The Beef Information Center (BIC) operates an office in Montréal. As an affiliate of Canadian Cattlemen Association, it represents all Canadian beef producers excluding Québec beef producers who do not contribute to the activities of the BIC. The BIC mainly promotes Canadian beef (generic promotion) without any mention of the province of origin. Its campaign has targeted consumers to inform them that beef is healthy and lean. Funds and staff are very limited and some beef buyers in Québec consider its promotional program to be not sufficiently aggressive or persuasive in regards to increasing sales of beef in Québec. In summary, the results of the survey indicate that retailers and wholesalers are aware of promotional activities by Alberta and the BIC while they are not aware of any promotional activities conducted by Québec, Ontario and the US. However, they do not consider the existing promotions to be effective. These conclusions should be used with caution since many of the differences between mean scores are not statistically significant although they may have an economic significance.

#### *b) Restaurateurs*

The restaurateurs were only slightly aware of beef promotions by Alberta (0.64) while they were not aware of any promotion from the US (-1.10) (Table 10 and Figure 8)<sup>41</sup>. In contrast to the wholesalers and the retailers, they rated the effectiveness of promotion positively for Alberta (0.40), but again negatively for the US (-1.13)<sup>42</sup>. Usually, restaurateurs do not have any contact with the packers, Alberta Agriculture or the ACC. That is the reason why some purveyors in Québec have introduced promotional campaigns for the purpose of promoting Alberta beef (information, posters and pamphlets). The ACC, Alberta Agriculture and the BIC have brought

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<sup>41</sup> Differences between mean scores are statistically significant.

<sup>42</sup> Differences between mean scores are statistically significant.

their support to these campaigns. Some restaurateurs have appreciated these campaigns, however they would like to see more direct contact with the packers or the ACC.

Recently the BIC prepared a beef manual that gives recipes, cooking methods and information relating to beef for restaurateurs. With the introduction of this manual, the perception of the restaurateurs may change. However, at the time of the survey many restaurateurs were unaware of the activities of the BIC and not fully satisfied with its promotional program.

In summary, the results of the survey show that restaurateurs are relatively unaware of promotions by Alberta and by the BIC, while they are not aware of any promotion by the US. They consider Alberta's promotions to be effective (although the mean score is close to 0) but they would like to see more direct contact with the representatives of the Alberta beef industry.

## **5.2 Qualitative analysis**

The second part of the survey consisted of qualitative questions in the form of open ended discussions (Figure 1 and 2, Supplemental questions). The answers provided by the respondents were grouped under five topics:

1. main beef attributes influencing beef purchasers in Québec,
2. marketing and distribution of beef in Québec,
3. origin of beef and branding,
4. political issues,
5. predicting the future of the Québec beef market.

The responses of the retailers and wholesalers separated from the responses of the restaurateurs.

### **5.2.1 The main beef attributes influencing retailer and wholesaler beef purchasers in Québec**

In section 5.1.1 a), it was noted that wholesalers and retailers consider marbling, price, and meat color as the most important beef attributes. The other characteristic most often mentioned was availability of the product. Availability is a concern for wholesalers and retailers. In Québec, there is high demand for inside round cuts used in the preparation of special beef products such as french roasts and tournedos. According to the beef buyers, the supply of inside rounds is not sufficient from Alberta and from the rest of the country to meet the demand. This forces beef purchasers to buy inside round from the US. Inside round is always available in the US due to large slaughtering capacity.

### **5.2.2 Marketing and distribution of retailer and wholesaler beef in Québec**

#### **5.2.2.1 Box beef and carcass beef**

The Québec beef market has been slow to convert from carcass beef to box beef (CITT,

1993). However, box beef is now more common in Québec. Respondents were asked if they intend to purchase a greater proportion of box beef in the future (Figure 1, question # 5). Sixty percent of the respondents mentioned that they purchase almost 100% of their beef as box beef, and box beef will account for 100% of their beef purchases in the near future. Other respondents stated that box beef accounted for less than 100% of their beef purchases, but they intend to buy more box beef in the future.

Two main factors may explain this trend toward box beef ; the cost of beef transport, and the cost of labor. Wholesalers and retailers are aware that the cost of transporting box beef is less than the cost of transporting carcass beef. Margins in the retail and wholesale sector are relatively low<sup>43</sup>. The use of box beef permits the retailers and the wholesalers to be more price competitive. The CITT (1993) study reveals that the cost of transporting box beef from Alberta to Eastern Canada is approximately \$15 a head less than the cost of transporting carcass beef. This corresponds to a gain of \$0.05 a kg to the beef industry<sup>44</sup>.

The high cost of labour for meat cutters is another incentive for retailers to purchase more box beef. Box beef is a good alternative for retailers who wish to reduce labour costs since there is less bone and waste in box beef than in carcass beef. Wholesalers mentioned that small food stores and meat shops have a strong interest in box beef due to the lower cost of labour required to cut beef into retail ready cuts. However, wholesalers believe that a small proportion of food stores and meat shops will continue to use carcass beef in the future. In summary, box beef is predominant in Québec and buyers will continue to buy more box beef at the expense of carcass beef in the future.

#### 5.2.2.2 Case ready

Respondents did not share the same opinions concerning case ready beef. Some retailers already utilize case ready beef in stores. They want to have a control over the product, and are not interested at this time in purchasing case ready beef from Alberta or elsewhere. They are not convinced that the shelf life of case ready beef products shipped from Alberta to Québec would be adequate. Furthermore, they do not believe that it is cheaper to purchase case ready beef from Alberta or US packers than from a central processor in Québec. At least three respondents were not interested in case ready technology. They stated that case ready beef involves higher prices at the retail level. Retailers suggest that the competition is too strong and the margins are too low in the beef sector in Québec to justify a price increase at the consumer level. In addition, respondents were concerned with consumer acceptance of the product ( i.e. color), the shelf life, and the reluctance of affiliate retailers to accept case ready beef into stores.

Some respondents however showed an interest in case ready beef. They stressed that case ready permits better bacterial control and allows for a more consistent product. They mentioned

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<sup>43</sup> Net margins in the retail and the wholesale sector in Québec are approximately 1% (Pitt, p.9, Dec. 1994).

<sup>44</sup> Based on average carcass weight of 715 pounds (Agriculture and Agri-Food Canada, 1995).

that case ready may be used to provide nutritional value information on packaging such as fat content and protein. Respondents are not certain whether or not they would prepare their own case ready products, or if they would purchase case ready beef from Alberta packers. Nevertheless, they believe that box beef processed into case ready products at the beef packing plant constitutes the cheapest alternative. They expect that Alberta packers will offer case ready products in the near future.

In summary, there is consensus to implement the use of box beef in Québec. In contrast, the situation is less clear regarding the use of case ready beef. The majority of respondents are interested in case ready beef, however, there is a great deal of uncertainty concerning this technology. In the short term, there is little indication of increased use of case ready beef in Québec.

### **5.2.3 Origin of beef and branding issues with retailers and wholesalers**

#### **5.2.3.1 Origin of beef**

Wholesalers and retailers in Québec are loyal to Alberta suppliers. Even if all beef suppliers offered beef comparable in price, quality and promotion (Figure 1, question # 2) , 60% of respondents would still choose Alberta as their beef supplier. They prefer Alberta beef due to the strong relationship with packers, and the trustworthiness of the product. 30% of respondents said that they would choose Québec beef because it is a local product. Wholesalers and the retailers occasionally purchase beef in the US for two reasons; price and availability. They consider US beef to be less expensive and more readily available than Alberta beef during certain periods of the year.

Respondents were asked what Alberta packers could do in order to increase competitiveness against US imports to Québec (Figure 1, question # 4). Most of the respondents stressed that Alberta beef prices should be more competitive. In addition, certain cuts should be more readily available from Alberta, particularly the inside round cuts. They believe that increased slaughter capacity in Alberta should increase the availability of inside rounds. Some respondents would like greater commitment by Alberta packers to the domestic market. They are worried that Alberta packers intend to increase trade with the US in the future. One respondent cited that he would like to see greater availability of box beef from Alberta packers.

In short, Québec beef purchasers have a strong preference for Alberta beef. However, they occasionally purchase beef from the US due to lower prices and the availability of certain cuts. Québec beef purchasers hope that Alberta packers will correct these weaknesses in the near future.

#### **5.2.3.2 Branding**

Québec retailers and wholesalers did not show a strong interest in branded beef products. They do not believe that Alberta should brand or identify its beef in Québec. None of the beef buyers indicated that it is preferable to label beef. They stated that consumers purchase beef based

on price and quality and they are not concerned about the origin of beef. They foresee many hurdles with the identification of beef origin since they do not have control on the availability of the product. They suggest that it would be difficult to control labelling since they purchase beef from different origins. Some retailers stated that there is a need for an information campaign prior to introducing labels for beef in Québec. Consumers must be very familiar with the product, then they will be more likely to purchase beef based on origin. Discussion was mainly related to the “Alberta beef ” label. Other identification such as “Western beef ” or other brand names have not been discussed<sup>45</sup>. However beef purchasers are not really concerned with brand names. They stated that branding is not a good idea in the Québec beef market unless there would be an adequate information campaign prior to the introduction of labels.

#### **5.2.4 Political issues with retailers and wholesalers**

The referendum in the fall of 1995 concerning Québec independence raised some concerns among representatives of the beef industry in Alberta (personal conversation with Alberta packers and the ACC, May 1996). In the event of separation between Québec and Canada, there is the possibility that Québec beef purchasers would no longer trade with Alberta. The debate is amplified by the fact that Québec is a large dairy producer. If Québec were to be displaced from the dairy supply management system after a declaration of independence, Québec might purchase beef from other places (Wilson, August 1995). Québec wholesalers and retailers stated that nothing would change if Québec and Canada were separated. All of them mentioned that there is no reason to modify their relationships with Alberta packers in the event of an independent Québec. They do not want to mix trade with politics. Buying patterns would only change if trade barriers such as tariffs or taxes arose that increased the price of beef in Québec. However such trade barriers are unlikely as Québec is not self sufficient in beef production (Table 6). In summary, there are no significant concerns from Québec beef buyers regarding the beef trade between Alberta and Québec should Québec separate. They want to maintain their ties with Alberta beef suppliers.

#### **5.2.5 Retailer and wholesaler predictions on the future of the Québec beef market**

The role of Québec beef wholesalers may change in the future. Two major retailers have their own distribution centers and they trade directly with the packers. In addition, respondents do not foresee any increase in beef consumption in Québec. Some respondents even expect a slight decrease in beef consumption due to an aging population and strong competition from the pork and chicken industry in Québec. For these reasons, wholesalers do not anticipate an increase in their activities in the beef sector. They are researching other commodities in order to diversify their operations. However, the wholesaler does have a necessary role in Québec. Independent food stores and meat shops do not have the facilities to handle large inventories of beef. The wholesaler has the ability to further age beef for retailers and butchers.

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<sup>45</sup> “Western beef ” identification is utilized by some butchers in Québec



At the retail level, retailers and wholesalers stressed that case ready will slowly become more common in the future. Further processed products and convenient beef products which promote ease of preparation will be more popular. Marinated beef may be implemented in regions where case ready beef cannot be implemented due to their remoteness from large urban centers such as Montréal and Québec city <sup>46</sup>. Some respondents mentioned that research and development of new beef products should be a priority for beef producers and packers in order to effectively compete against chicken and pork products.

In summary, although wholesalers and retailers do not predict any increase in beef consumption in Québec, they stated that it is possible to maintain the current levels of beef consumption. New marketing practices such as case ready beef and new beef products should help to stabilize beef consumption in Québec.

### **5.2.6 The main beef attributes influencing restaurateur beef purchasers in Québec**

It was mentioned in section 5.1.1 b) that the restaurateurs consider marbling, aging and price as being the most important beef attributes. Restaurateurs stressed consistency of the quality, origin, and fat trim as other important beef attributes.

Consistency of the product quality is crucial to restaurateurs. They want to serve the same quality of beef all the time. They have regular customers, and customers expect to eat the same product every time they go to a restaurant to eat beef. If the quality is not consistent, there is a high probability that the customers will order beef substitutes such as chicken or pork, or they may try another restaurant. Origin of beef is also important to the restaurateurs. Most of them prefer Alberta beef, while some restaurateurs prefer US beef. The origin is taken into account when they order beef from the purveyors. They even differentiate among beef packers. For example some restaurateurs mentioned the advantages and disadvantages of purchasing “Cargill beef” versus “Lakeside-IBP beef”. Fat trim was also considered to be an important attribute of beef. Restaurateurs have certain specifications and they want the least possible amount of external fat so that waste can be minimized and yield increased. They stated that fat trim is usually more adequate in Alberta beef than in US beef. In summary, restaurateurs viewed marbling, aging and price as being the most important beef attributes. However, consistency of quality, fat trim and origin are also worth mentioning.

### **5.2.7 Marketing and distribution of restaurateur beef in Québec**

#### **5.2.7.1 Portion cuts**

Portion cut is the equivalent of case ready in the food service sector. When restaurateurs use portion cuts, they need less staff in the restaurant as the beef is ready to cook at the time of delivery. In Québec, beef portion cuts are processed by small central processors who offer their service to the purveyors and the restaurateurs. Restaurateurs are fully aware of this method of

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<sup>46</sup> For example, Eastern and Northern Québec

marketing beef. Approximately 40% of them already utilize portion cuts. However, few restaurateurs purchase 100% of their beef in portion cuts. Several restaurateurs only purchase portion cuts as a small proportion of their total beef purchases. Restaurateurs use portion cuts because the size of cuts is more standard when compared with the conventional method of cutting beef in restaurants. Also, there is no waste and they can save on labour costs. Portion cuts are utilized during the peak tourist season when there is a strong demand for beef. Most restaurateurs do not use portion cuts at 100% because they want to be flexible relative to the specific needs of customers. In general, if they are satisfied with the portion sizes then they are willing to pay higher prices for portion cuts since there is less waste and the product is more consistent.

The majority of the restaurateurs (60%) do not utilize portion cuts. They mentioned several disadvantages to this concept:

- prices are too high,
- cuts are too standard,
- no control over the aging process,
- shelf life is reduced with portion cuts,
- not enough high quality.

Some respondents stated that they would be interested in portion cuts if the price was lower, otherwise, they prefer cutting their beef in - house. In addition, some respondents would be interested in purchasing portion cuts from Alberta packers. They stated that the product would be consistent and affordable. In summary, beef portion cuts are more established among restaurateurs than is case ready beef among retailers or wholesalers. However the majority of the restaurateurs are reluctant to make greater use of this technology. Their stated reasons were price and the lack of flexibility with this technology.

## **5.2.8 Restaurateur issues in origin of beef and branding**

### **5.2.8.1 Origin of beef**

Restaurateurs are loyal to Canadian beef suppliers. If all beef suppliers offered beef with the same price, quality and promotion (Figure 2, question # 2), none of the restaurateurs would purchase beef from the United States. Approximately 45% of the respondents would purchase beef from Québec suppliers in order to support local production. In addition, respondents believe that trade relationships should be easier to maintain with Québec packers since they are geographically closer to the restaurateurs. 40% of respondents would still purchase beef from Alberta since they trust the product and they do not want to change beef suppliers. The remaining 15% would be indifferent between purchasing beef either from Alberta or Québec.

Respondents were asked what Alberta packers should do in order to compete against US imports into Québec (Figure 2, question # 4). Close to 50% would like to see an increase in promotional activities by Alberta beef suppliers. Some restaurateurs would like to visit feedlots and beef packing plants in Alberta. In addition, some restaurateurs would like to see more advertising and more information for restaurateurs regarding Alberta beef. Furthermore, they would like better information and education for consumers concerning beef products. They

stressed that consumers should know why they have to pay higher prices for Alberta beef. Some restaurateurs would like to receive information directly from Alberta packers and even trade directly with the packers. Finally, other suggestions provided by the respondents were the following; more marbling in beef (grade “AAA”), more aging, more portion cut products, and lower prices.

#### 5.2.8.2 Branding

The possibility of branded beef products from Alberta raised more interest among restaurateurs than among retailers and wholesalers. More than 60% of restaurateurs are interested in identification of Alberta beef. Restaurateurs stated that identifying Alberta beef would be positively received by their customers. They supported the idea that Alberta beef has a good reputation which is worth promoting. They are willing to promote Alberta beef on menus or elsewhere in the restaurant. However, two respondents do not want to mention the name “Alberta beef”. They would prefer a specific brand name such as “IBP beef” or “Cargill beef”. They were concerned about the negative consequences of promoting Alberta beef because they are members of an organization called “cuisine régionale” (“regional cooking”).

Approximately 40% of respondents were not interested in identifying Alberta beef in their restaurants. They contend that their customers are not concerned about the origin of beef and the identification would not increase the popularity of beef in restaurant. In addition some restaurateurs stated that identifying Alberta beef might have a negative impact on the consumption of beef in cases where the customers want to purchase local products. In Québec city, some restaurateurs mentioned that the identification of Alberta beef might be harmful to them for political reasons. They would not accept any identification in their restaurant but they are open to any promotional campaign that would have the objective of informing consumers on beef products. Thus, the majority of the respondents are positive concerning the identification of Alberta beef in restaurant. They are ready to cooperate with the Alberta beef industry and the government in the promotion of Alberta beef. The restaurateurs who are not interested in this idea mentioned that identification of Alberta beef in restaurant would not increase the consumption of beef, and possibly could even have negative consequences on beef consumption.

#### 5.2.9 Political issues with restaurateurs

Restaurateurs were asked the same question as retailers and wholesalers regarding the hypothetical separation of Québec and Canada (Figure 2, question # 9). Responses were similar to those of retailers and wholesalers. A hundred percent of restaurateurs mentioned that nothing would change if Québec and Canada were separated. They would continue to purchase beef from Alberta unless trade barriers were introduced between Québec and the rest of the country, or if the customers no longer wanted to eat Alberta beef. They mentioned that the price of the product and the needs of the consumers are more important than politics. In summary, the restaurateurs are not worried about the issue of separation. They do not intend to change beef suppliers unless there are economic incentives to do so.

### **5.2.10 Restaurateur predictions the future of the Québec beef market**

According to restaurateurs, consumption of beef is not expected to increase in the future. Half of the respondents felt that the consumption of beef would remain steady in the future. Less than half of the respondents stated that the consumption will decrease, and only a few restaurateurs stated that consumption of beef would increase. Restaurateurs provided several factors that might contribute to maintaining beef consumption, or slightly decreasing beef consumption in the future:

- the population is older and older people tend to eat less beef,
- young people eat less beef,
- beef substitutes such as pork and chicken are becoming increasingly popular in restaurants and tend to affect beef consumption,
- new substitutes such as lamb and ostrich may cause a decline in beef consumption in restaurants,
- some consumers feel guilty about eating beef due to concerns about fat content.

Restaurateurs do not foresee the development of new beef products that could help to increase beef consumption in restaurants. They believe that new beef products would be useful to compete with pork and chicken products but it seems that beef consumers prefer traditional products.

Restaurateurs stressed that if beef prices remain high in the future, some restaurateurs will attempt to sacrifice the quality of the beef. If restaurateurs serve lower quality beef, consumers will probably eat less beef and the entire restaurant sector could be affected. Restaurateurs would like to see beef prices more competitive particularly with the price of chicken. Finally, there is no indication that the use of portion cuts will increase in the near future. Restaurateurs are aware of this concept but they do not intend to use more beef portion cuts in the near future unless the price decreases, or Alberta packers develop their own beef portion cuts.

In summary, restaurateurs are no more optimistic than retailers and wholesalers regarding beef consumption in Québec. They expect that the demand for beef will remain steady or decline at the expense of beef substitutes such as pork and chicken. Price, demographic factors, and health concerns are responsible for this slightly pessimistic forecast. However restaurateurs stressed that it is possible to maintain beef consumption at current levels with greater information and better education on beef products. Lower beef prices relative to the prices of beef substitutes would also contribute to maintaining beef consumption at the current level in Québec.

## **5.3 Summary**

The quantitative and qualitative sections revealed that marbling, price and meat color were considered to be the most important beef attributes by Québec wholesalers and retailers. They gave Alberta beef the highest score regarding marbling and meat color, and the lowest score regarding price. They gave Alberta beef the highest scores concerning all other beef attributes. In general, wholesalers and retailers gave the second highest scores to US beef. Québec and Ontario obtained the lowest scores. Not all of these differences were statistically significant, however they

may still indicate economic importance.

Restaurateurs mentioned marbling, aging and price as the most important beef attributes. They gave Alberta beef the highest score concerning aging, while US beef obtained the highest score for marbling and price<sup>47</sup>. Alberta beef was rated higher than US beef for all other beef attributes. Retailers, wholesalers and restaurateurs were aware of promotions carried out by the Alberta beef industry and the government. However, they did not consider the existing promotions to be effective.

The qualitative section discussed some important issues regarding the Québec beef market. Beef buyers occasionally purchase beef in the US due to lower prices, greater availability of certain cuts, and in the case of the restaurateurs, more marbling. Restaurateurs considered the origin of beef as important and they were receptive to a branding program for Alberta beef. Retailers and wholesalers were opposed to a branding program unless an information campaign would be implemented before the introduction of labelling or branding.

Box beef is the primary form of beef marketed in Québec and the trend regarding the use of box beef is upward. Case ready beef has raised interest among retailers and wholesalers but there is a lot of uncertainty regarding this technology. Portion cuts are utilized by many restaurateurs in Québec and there is the potential for greater use of this technology in the medium and long term.

The issue of Québec's independence is not a concern for beef buyers in Québec. They stressed that they want to maintain their ties with Alberta packers regardless of what may happen politically. Finally, retailers, wholesalers and restaurateurs predict that the consumption of beef will not increase in the future due to the aging population, the presence of beef substitutes and concern about fat content by Québécois.

## **Chapter 6: CONCLUSIONS AND MARKETING STRATEGIES**

The final chapter summarizes the main conclusions of this research project. The chapter then provides recommendations of marketing strategies for the Alberta beef industry. Finally, suggestions for future research needs are provided.

### **6.1 Summary**

This study examined the Québec beef market from the perspective of the Alberta beef industry. Alberta is the largest cattle and beef producing province in Canada. The Alberta beef processing sector undertook considerable rationalization which resulted in fewer and larger scale operations. Furthermore, this sector is expanding and the number of cattle slaughtered in Alberta

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<sup>47</sup> Differences between marbling mean scores were not statistically significant.

is expected to increase significantly. Although Alberta exporters have developed the international export market for beef, the domestic market, particularly Québec, remains the main purchaser of Alberta beef. Québec mainly purchases grade “A” beef and constitutes the main destination for grade “A” beef produced in Alberta. Alberta beef packers desire to maintain their market share in the Québec beef market. They are receptive to any requests from Québec wholesalers and retailers regarding case ready beef technology.

Québec has the largest beef deficit in Canada. Two factors may serve to explain this large deficit. Cattle and beef production have declined over the last ten years in Québec. In addition, the beef processing sector operates with excess capacity and it is not able to guarantee an adequate supply to Québec beef buyers. The second factor discussed was the strong demand by Québécois for beef. Québécois consume on average 20% more beef per capita than the average Canadian. A large part of this consumption is imported from Alberta although US beef has gained in importance over the last ten years. However beef substitutes such as pork and chicken gained in popularity among consumers, particularly in the restaurant sector due to promotion. Pork and chicken may continue to provide strong competition to the beef market in the future.

Marbling, price and meat color were considered the most important beef attributes by Québec wholesalers and retailers. Alberta beef was rated highest for meat color and marbling, and rated lowest for price. Beef from Alberta was rated highest for all other beef attributes in comparison to the beef from other suppliers. However, Québec wholesalers and retailers rated negatively the effectiveness of promotion by both the Alberta beef industry and the government. Not all of these differences were statistically significant, however they may still indicate economic significance. Québec wholesalers and retailers have a strong preference for Alberta beef. Nevertheless, they occasionally purchase beef from the US due to lower prices and the availability of certain cuts such as inside rounds. Alberta beef packers face excess demand from Québec regarding inside round cuts.

Box beef is predominant in Québec and it will continue to gain popularity in the future. Case ready beef has raised interest among retailers and wholesalers, however there is a lot of uncertainty regarding this technology. Shelf life, consumer acceptance, price and the reluctance of affiliate retailers to accept case ready beef into stores are among the hurdles that retailers and wholesalers identified. Québec wholesalers and retailers were not enthusiastic about branded beef products from Alberta. They stressed that an information campaign prior to the introduction of a branding program would be necessary.

Québec wholesalers and retailers do not foresee any increase in the consumption of beef in Québec due to an aging population and strong competition from the pork and chicken industries. They believe that case ready beef will be more popular in the future as well as beef products which are easy-to-prepare.

Restaurateurs mentioned marbling, aging and price as the most important beef attributes. Alberta beef was rated highest for aging, while US beef was rated highest for marbling and

price<sup>48</sup>. Alberta beef was rated higher than US beef for all other beef attributes. The effectiveness of promotion was rated low for both Alberta and the US. Other beef attributes were considered to be important by restaurateurs. These are: consistency of the quality, fat trim and origin. Québec restaurateurs are major purchasers of Alberta beef. However they sometimes purchase beef in the US due to lower prices and greater availability of beef products with more marbling. They would like to receive more information from Alberta beef packers on Alberta beef products. Restaurateurs desire better contact with Alberta beef packers.

Portion cuts are used by many restaurateurs in Québec. However, the majority of restaurateurs do not utilize portion cuts. Their stated reasons for not using this technology were price and the lack of flexibility with this technology. Although portion cuts are used in Québec, there is potential for greater use of this concept in the medium and long term.

Branded beef products from Alberta raised strong interest among restaurateurs. They are willing to promote Alberta beef in restaurants. Most of restaurateurs believe that the identification of Alberta beef would have a positive impact on beef consumption in restaurants. Restaurateurs believe that the consumption of beef in Québec is not expected to increase in the future due to the aging population, beef substitutes and the fat content concern among Québécois. They stressed that it is possible to maintain beef consumption at current levels with greater information and better education about the benefits of beef products. They also expect that lower prices particularly from Alberta will continue to contribute to the maintenance of current level of beef consumption in Québec.

Although the issue concerning Québec independence raised some concern among representatives of the beef industry in Alberta, these concerns were not present among Québec beef buyers. All retailers, wholesalers and restaurateurs mentioned that nothing would change concerning the beef trade between Alberta and Québec if Québec and the rest of Canada were separated. They want to maintain their positive relationship with Alberta beef packers.

## **6.2 Marketing strategies**

The review of the final results and comments generated by this study leads to several marketing strategy recommendations for the Alberta beef industry and the Government of Alberta. These strategies are discussed in terms of four broad topics; developing an educational program, introduce branding and portion cuts (restaurant sector), introducing case ready (retail sector) and price.

### **6.2.1 Development of an educational program**

#### *a) Consumers*

Although wholesalers and retailers are opposed to the identification of Alberta beef, they

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<sup>48</sup> Differences between marbling mean scores were not statistically significant.

mentioned that more information regarding beef products would be useful to Québec consumers. The BIC has already provided information to Québec consumers regarding the nutritional value of beef, cooking methods, and beef recipes. The BIC cannot mention the characteristics inherent to the origin of beef because this organisation is funded by all Canadian beef producers<sup>49</sup>. However, the Alberta beef industry has the option of going beyond this type of information and providing information on the origin of beef, raising conditions of the cattle, (such as unpolluted air, natural water resources) food safety standards in the packing plants (HACCP) and the like. Information regarding marbling content and aging may also be provided since, for example, most consumers are not aware of the fact that longer aging means greater tenderness. At the first stage of the program there would be no need to introduce branding at the retail level. Subsequent to the introduction of an educational program, a consumer survey in Québec would provide information to Alberta packers as to whether or not the introduction of branding would be appropriate. The educational program should be introduced with the collaboration of the Québec wholesalers and retailers. Traditional media such as TV, radio or magazine or in store displays could be used to implement the program.

#### *b) Restaurateurs*

Some restaurateurs have received information regarding Alberta beef through their purveyors. However restaurateurs would prefer direct contact with Alberta beef packers. Alberta beef packers could provide the same information to restaurateurs as consumers. Of interest are food safety standards in the packing plants, raising conditions of the cattle, information regarding new beef products and new marketing practices. This information could be distributed through conferences and trade shows or beef packers could organize their own meetings in different regions of Québec. An original method of informing restaurateurs concerning beef products would be to organize an annual trip to Alberta. The purpose of these trips would be to show restaurateurs how the feedlots and beef packing plants are organized and run in Alberta. This would benefit both restaurateurs and packers. Beef packers and producers would have the opportunity to listen to the concerns of restaurateurs and make the necessary improvements to their products and services. Restaurateurs would benefit since they would have better knowledge regarding the environment of Alberta beef production. They would be in a better position to inform the consumer and promote Alberta beef.

### **6.2.2 Branding and portion cuts**

Most restaurateurs were favorable to the identification of Alberta beef. A brand name or Alberta beef label could be created to designate a superior product designed for restaurateurs who serve high quality beef. The results of the qualitative survey demonstrate that an Alberta beef label would not be accepted by all restaurateurs. The use of private brand name such as “Cargill beef” could constitute a better alternative for some restaurateurs. This product would contain a high level of marbling (grade “AAA” or “Prime”), aged between 10 to 21 days or more depending on the needs of restaurateurs and the product would be carefully trimmed. Portion cuts would

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<sup>49</sup> Excluding Québec beef producers.



guarantee a product of consistent quality. According to the qualitative results, 40% of restaurateurs utilize portion cuts. This indicates the potential for the success of this technology. In addition, portion cuts would assure restaurateurs that the beef they purchase is sourced from Alberta. The purpose of branding and portion cuts would be to offer restaurateurs beef products that meet their specifications (i.e. marbling, aging, fat trim). In addition, restaurateurs would be able to promote a brand name to their customers which indicates a superior product. The role of the purveyors would be necessary to handle the large inventories of beef purchased by restaurateurs.

### **6.2.3 Case ready**

There is interest in case ready technology among Québec wholesalers and retailers. It is incumbent on Alberta beef packers to take the lead and to offer case ready beef products on a trial basis to Québec wholesalers and retailers. At the first stage, using a brand name did not seem to be appropriate. However, an indication of nutritional value information on each package would constitute a starting point prior to the introduction of branding. Case ready beef may represent an alternative for Alberta beef packers in regards to holding or increasing their market share in Québec. If Alberta beef packers wait and allow Québec retailers and wholesalers to process their own case ready products in Québec it will allow beef purchasers the freedom to purchase their beef from non - Alberta suppliers. Case ready beef would ensure that Alberta beef packers have firm demand from beef buyers.

### **6.2.4 Price**

The quantitative and qualitative results of the survey indicate that the price of Alberta beef is a major concern among wholesalers, retailers and restaurateurs. Alberta beef producers and packers must try to control costs, improve the productivity of the feedlots and the efficiency of beef packing plants. The assistance of the government of Alberta to beef producers and beef packers is essential in this process. While the government of Alberta no longer funds beef promotion in Québec, its role should be to fund research and development to ensure the competitiveness of the Alberta beef industry. Research is needed for case ready and portion cut technologies to ensure a sufficient shelf life, to distribute beef from Alberta to Montréal and then to distribute beef to the main regions of Québec. According to Fang and Goddard (1995), research and development in the beef sector may result in lower production costs and producer prices, increase supply, reduce retail prices and increase beef demand. Research and development in Alberta could lead to more competitive pricing between Alberta beef and US beef in the Québec beef market.

### **6.2.5 Summary**

There are four possible actions that the Alberta beef industry may take in regards to the Québec beef market to hold Alberta's market share or possibly increase the sale of beef,

particularly in the restaurant sector. These actions are certainly not the only ones that Alberta may initiate. The purpose of introducing these marketing strategies would be to demonstrate to Québec beef buyers and consumers that the Alberta beef industry does not take the Québec beef market for granted, and that it is able to fulfill the needs of the different niche markets.

### **6.3 Future research needs**

Based on the findings of this research project, areas worthy of additional study are:

- an updated consumer study in many regions of Québec to assess consumers' concerns about the origin of beef, and if consumers desire branding or labelling of Alberta beef,
- a detailed analysis of the price spread between Alberta beef prices and US beef prices in the Québec market. A greater understanding of the price spread between Alberta and the US would allow the Alberta beef industry to better price its beef products in the retail and restaurant sectors in Québec,
- a study of the Ontario and the US markets to determine the position of the Ontario and the US beef industry's toward the Québec beef market. Ontario and the US are the main competitors of Alberta in the Québec high quality beef market. Information concerning their strategies and plans regarding the Québec beef market is relevant to Alberta,
- a study of the Ontario and the US markets to assess the perception of Ontario and US beef buyers and consumers regarding Alberta beef. The US and Ontario are among the main beef buyers of Alberta beef. It would be useful to compare the perceptions of Ontario and US purchasers and consumers regarding Alberta beef with the results of this study.

## REFERENCES

- Agricultural Economics Research Council of Canada. The Montréal - Alberta Beef System. Ottawa, 1977.
- Agriculture and Agri-Food Canada. Livestock and Meat Trade Report. 1986-95.
- Agriculture and Agri-Food Canada. Livestock Market Review. 1986-1995.
- Alberta Agriculture, Food and Rural Development. Alberta Beef Supply and Disposition. Market Analysis and Statistics Branch, unpublished data, 1986-1995.
- American Meat Institute. A Study of the Retail Economics of Case-ready Meats. Washington, June 1988.
- Anonymous. "Canadian Food Store Sales, 1994". Canadian Grocer, February 1995, p.26.
- Anonymous. "Eu Trade Deal Irks CCA". Cattlemen, January 1996, p.54.
- Anonymous. "New 4-A Grade by Year-End ". Cattlemen, May 1996, p.38.
- Beef Industry Trade and Development Committee. A Market Opportunity. December 1995.
- Beef Information Centre. A Successful Case Ready System. Calgary, 1994.
- Beef Information Centre. Beef Industry Strategic Planning Workshop # 2: Marketing and Merchandising. Calgary, June 16-17, 1994
- Beef Information Centre. Consumer Segmentation Study. Toronto, 1992.
- Berenson, M. and D.M. Levine. Basic Business Statistics: Concepts and Applications, Sixth Edition. Prentice Hall, Englewood Cliffs, N.J., 1996.
- Boivin, H.. "Structure Financière des Fermes de Bovins de Boucherie au Québec: Comparaison avec L'Ontario et L'Alberta". Bovins du Québec, October 1995. p. 14-15.
- CAA and Société des Alcools du Québec. Répertoire des Bonnes Tables du Québec. Edition 1995 and 1996.
- Canada Beef Export Federation. Pursuing Value in Exports Markets. A presentation for Alberta Agricultural Economics Association (AAEA), Red Deer, May 2, 1996.
- Canadian International Trade Tribunal (CITT). An Inquiry into the Competitiveness of the

Canadian Cattle and Beef Industries. Minister of Supply and Services, Canada, November 1993.

Canfax. “Beef Watch”. Cattlemen, May 1996, p. 29-32.

Churchill, G.A. . Marketing Research: Methodological Foundations. Fifth Edition, The Dryden Press, 1991.

Commission of Inquiry into the Marketing of Beef and Veal. Report. Ottawa, 1976.

Consortium. Étude de Marché sur la Commercialisation du Boeuf au Québec. December 1995.

Duckworth, B. “Canada Primed to add New Category of Beef grade”. The Western Producer, August 1, 1996, p. 5.

Duckworth, B. “Meat Retailer Calls on Cattle Producers to Change Ways”. The Western Producer, July 4, 1996. p.12.

Faminow, M.D. and C.E. Ward. “Competitiveness in the Canadian and United States Beefpacking industry: The Effects of Free Trade”. Journal of international Food and Agribusiness Marketing, vol. 6(1), 1994.

Fang C. And E. Goddard. Optimal Investment Allocation in Generic Advertising and Research: The Case of the Canadian Beef, Egg, Pork and Milk Industries. A selected paper at the AAEEA annual meeting, Indianapolis, 1995.

Fédération des Producteurs de Bovins du Québec. Les États Généraux du Monde Rural et la Production Bovine. August 1990.

Fédération des Producteurs de Bovins du Québec. Rapport Annuel 1996. April 24, 1996.

Foug . Québec Beef Market: Consumer study. March 1990.

Gill, C.O. and T. Jones. “ The Display of Retail Packs of Ground Beef after their Storage in Master Packages under Various Atmospheres”. Meat Science (37), 1994 a, p. 281-295.

Gill, C.O. and T. Jones. “ The Display Life of Retail-Packaged Beef Steaks after their Storage in Master Packs under Various Atmospheres”. Meat Science (38), 1994 b, p.385-396.

Green, P. E., D.S. Tull and G. Albaum. Research for Marketing Decisions. Prentice Hall, Englewood Cliffs, N.J., 1988.

Infras Inc. Etude Empirique par Entrevues de Groupes sur le Marché du Bovin de Réforme du Québec. January 1992.

- Kim, R.B.y., J.R. Unterschultz, M. Veeman and P. Jelen. Analysis of the Korean Beef Market: A study of Hotel Buyers's Perspectives of Beef Imports from Three Major Sources, Part 1. Staff paper, Department of Rural Economy, University of Alberta, 1996.
- Kohls, R. and J. Uhl. Marketing of Agricultural Products, Seventh Edition. MacMillan Publishing Compagny, N.Y., 1990.
- Kotler, P. Marketing Management, Seventh Edition. Prentice Hall, inc. Englewood Cliffs, N.J., 1991.
- MacMillan, J., B. Chorney and R. Richmond. Red Meat Forum Project. Department of Agricultural Economics and Farm Management, University of Manitoba, Winnipeg, March 1994.
- MAPAQ. Commerce International du Canada et du Québec: Produits Agricoles, Alimentaires et Marins, Bilan Statistique 1985-1995. Direction des Etudes Economiques, 1995.
- MAPAQ. État de la Situation de L'industrie de la Volaille. February 1995.
- MAPAQ. La Consommation des Viandes. June 1995.
- MAPAQ. La Mise en Marché du Bovin au Québec. Service des analyses sectorielles, November 1995.
- MAPAQ. L'industrie Porcine du Québec. Direction de l'analyse et de l'information Economiques, 1996.
- MAPAQ. Plan Stratégique de Développement: Filière du Boeuf au Québec. June 1994.
- MAPAQ. Profil des Exploitations Agricoles: Secteur Bovin. Direction de l'analyse et de l'information économiques, 1993.
- MAPAQ. Statistics on Beef Production and Consumption. Unpublished data, 1986-1995.
- McCloskey, D.N. and S.T. Ziliak. "The Standard Error of Regressions". Journal of Economic Literature, Vol. XXXIV, March 1996, p. 97-114.
- Montréal Saine Marketing. Table Filière Veau: Étude de Marché sur le HRI. April 1995.
- Nagashima A.. "A Comparison of Japanese and US Attitudes toward Foreign Products". Journal of Marketing, 34, January 1970, p. 68-74.
- Nowak, J. P.. Alberta's Beef Industry Year 2000. Unpublished Thesis, Department of Rural Economy, University of Alberta, 1987.

Nunes, K. "Global HACCP". Meat and Poultry, May 1996, p. 16-18.

Papadopoulos, N., L.A. Heslop and G. Bamossy. "An International Comparative Analysis of Consumer Attitudes toward Canada and Canadian Products". Canadian Journal of Administrative Sciences 11(3), 1994, p. 224-239.

Peat Marwick. To Assess the Impact on the Canadian Market on Ungraded, Non-Manufacturing Beef. Edmonton, June 1989.

Pitt, F. "La Distribution Alimentaire Démythifiée". L'Alimentation, December 1994, p.7-9.

Richler, J. "Dreaming of a Succulent Canadian Steak: Fat Chance". Saturday Night, June 1996, p. 81-82.

Statistics Canada. Apparent per Capita Food Consumption in Canada. Cat. 32-229, 1996.

Statistics Canada. Canadian Economic Observer. Cat. 11-010, December 1995.

Statistics Canada. Livestock Statistics. Cat. 23-603, 1986-1995.

Statistics Canada. Quarterly Demographic Statistics. Cat. 91-002, 1996.

Thomas, L. "What do packers want". Cattlemen, August 1995, p.17.

Thomas, L. "Will Case-ready Beef Improve Retail Sales" ? Cattlemen, December 1994, p. 12-14.

Tower, C. "Meat Inspection Rules not a Problem". The Western Producer, July 18, 1996, p.70.

USITC. Live Cattle and Beef: US and Canadian Industry, Profiles, Trade, and Factors of Competition. Washington, DC, January 1993.

Wilson, B.. "Beef Producers Aim to Keep Québec Sales". The Western Producer, August 31, 1995, p.13.

Zafiriou, M. "The Canadian Experience with Lean Beef". Buse, R. C. (ed.). The Economics of Meat Demand. Charleston, S.C., 1989, p.346-357.

## APPENDICES

### Table 1

#### Alberta Supply and Disposition of Beef \* (1986-1995)

Year	Production	International imports	Total supply	Alberta consumption	International exports	Interprovincial exports **
.....Thousand tonnes .....						
<b>1986</b>	318.9	0.5	319.4	97.8	25.3	196.4
<b>1988</b>	361.3	1.9	363.2	99.8	21.7	241.7
<b>1990</b>	403.5	7.1	410.6	97.5	34.2	278.9
<b>1992</b>	421.3	10.8	432.1	98.5	64.5	268.9
<b>1994</b>	474.9	8.0	482.9	94.8	119.1	269.1
<b>1995**</b>	486.6	7.7	494.3	95.8	121.8	276.7

\* Carcass and boxed beef only (carcass weight)

\*\* Estimate

Source: Alberta Agriculture, Food and Rural Development. Market Analysis and Statistics Branch (1996)

### Table 2

#### Beef Cow Herd Evolution (Québec, Alberta and Canada)

Year	Québec	Alberta	Canada
.....Thousand head .....			
<b>1986</b>	161.0	1,303.0	3201.9
<b>1988</b>	166.0	1,390.0	3358.4
<b>1990</b>	184.0	1,511.0	3590.7
<b>1992</b>	193.0	1,626.0	3862.1
<b>1994</b>	212.0	1,774.0	4205.0
<b>1995</b>	220.0	1,848.0	4416.8

Source: Stat Can , Cat. 23-603 (1986-95)

**Table 3**

**Alberta Slaughter Cattle, Grading and Live Cattle Exports**

Year	Origin of cattle slaughtered in Alberta**				Grading			Live cattle exports to the US
	Alberta	Sask.	Other provinces and the US	Total cattle slaughtered in Alberta	A or A1-A4*	AA	AAA	
..... Thousand head .....								
1986	1,136.6	5.0	1.0	1,142.6	942.4	-	-	27.2
1988	1,167.8	58.4	0.4	1,226.6	1,027.0	-	-	199.2
1990	1,322.5	6.0	0.9	1,329.5	1,113.4	-	-	196.9
1992	1,360.4	10.4	1.6	1,372.4	287.5	394.0	196.4	358.8
1994	1,440.9	40.2	7.0	1,488.1	279.8	593.7	338.9	361.3
1995	1,476.0	43.6	17.6	1,537.2	292.7	616.3	283.9	424.1

- : Not available

\* The grading system was changed in 1992 with the introduction of marbling

\*\* Based on federally and provincially inspected slaughter only

Source: Livestock Market Review(1986-95)

**Table 4**

**Alberta Beef Exports \*(1986-1995)**

Year	Interprovincial exports **				International exports		
	BC	Québec	Ontario	Other	US	Japan	Other
..... Thousand tonnes .....							
1986	40.8	106.0	24.1	25.5	23.5	1.5	0.3
1988	52.8	122.5	48.4	18.0	20.9	0.8	0.1
1990	53.3	141.5	70.1	14.0	31.4	2.0	0.8
1992	51.4	137.3	67.8	12.4	62.3	2.1	0.2
1994	70.8	126.5	53.8	18.0	115.0	3.5	0.7
1995**	63.6	138.3	60.9	13.8	116.8	3.7	1.3

\* Carcass and boxed beef only (carcass weight)

\*\* Estimate

Source: Alberta Agriculture, Food and Rural Development. Market Analysis and Statistics Branch (1996)



**Table 5**

**Québec cattle marketing, slaughter cattle production and grading**

Production			Slaughter **		Grading (steer-heifer)
Year	Steer-heifer	Cow-bull	Steer-heifer	Cow- bull	A,AA,AAA or A1-A4*
..... Thousand head .....					
<b>1986</b>	80.3	209.8	86.0	235.0	70.5
<b>1988</b>	58.0	172.9	54.1	198.3	45.9
<b>1990</b>	42.9	163.1	45.9	194.3	42.6
<b>1992</b>	56.6	177.5	39.5	189.2	25.7
<b>1994</b>	62.3	121.4	42.4	174.4	36.8
<b>1995</b>	68.7	105.6	49.7	152.7	42.6

\* The grading system was changed in 1992 with the introduction of marbling

\*\* Based on federally and provincially inspected slaughter only

Source: Livestock Market Review (1986-95) and Livestock and Meat Trade Report(1986-95)

**Table 6**

**Québec supply and disposition of beef (1986-1995)\***

Year	Production ***	Internation. imports	Interprov. imports **	Total supply	Internation. exports	Québec consumption **	Self sufficiency ratio (%)
..... Thousand tonnes .....							
<b>1986</b>	82.9	15.0	230.5	328.4	26.3	302.1	27.4
<b>1988</b>	66.1	26.0	223.9	316.0	18.0	298.0	22.2
<b>1990</b>	63.4	25.5	225.0	313.9	25.4	288.5	22.0
<b>1992</b>	61.4	58.7	182.2	302.3	24.4	277.9	22.1
<b>1994</b>	59.4	68.7	163.3	291.4	19.6	271.8	21.9
<b>1995</b>	54.6	42.8	187.7	285.1	13.3	271.8	20.1

\* Carcass weight

\*\* Estimate

\*\*\* Based on federally and provincially inspected slaughter only

Source: Livestock Market Review (1986-95) and MAPAQ (1986-95)

**Table 7**  
**Québec beef imports\***

	<b>Interprovincial</b>	<b>imports **</b>	<b>International</b>	<b>imports</b>
<b>Year</b>	<b>Alberta</b>	<b>Other provinces***</b>	<b>US</b>	<b>Other****</b>
..... Thousand tonnes .....				
<b>1986</b>	106.0	124.5	2.6	12.4
<b>1988</b>	122.5	101.4	10.6	15.4
<b>1990</b>	141.5	83.5	16.3	9.2
<b>1992</b>	137.3	44.9	29.2	29.5
<b>1994</b>	126.5	36.8	28.8	39.9
<b>1995</b>	138.3	49.4	10.6	32.2

\* Carcass weight

\*\* Estimate

\*\*\* Mainly Ontario in 1994 and 1995. There is no official data from Ontario Agriculture concerning interprovincial beef trade.

\*\*\*\* 1986-1992: Australia, New-Zealand and South America. 1994 and 1995: Australia and New-Zealand

Source: MAPAQ (1985-95) and Alberta Agriculture, Food and Rural Development (1996)

**Table 8**  
**Per capita consumption of all meats (Québec and Canada)**

	<b>Beef *</b>		<b>Pork *</b>		<b>Chicken **</b>		<b>Total</b>	
<b>Year</b>	<b>Québec</b>	<b>Canada</b>	<b>Québec</b>	<b>Canada</b>	<b>Québec</b>	<b>Canada</b>	<b>Québec</b>	<b>Canada</b>
..... Kg per capita .....								
<b>1986</b>	46.2	38.1	27.8	27.8	22.1	19.8	96.1	85.7
<b>1988</b>	44.8	36.2	28.0	28.0	24.0	21.9	96.8	86.1
<b>1990</b>	42.6	33.9	26.1	26.1	23.9	22.1	92.6	82.1
<b>1992</b>	40.1	32.1	28.2	28.2	25.1	22.2	93.4	82.5
<b>1994</b>	37.3	31.4	28.2	28.2	27.7	25.1	93.2	84.7
<b>1995</b>	37.3	31.4	28.2	27.7	27.4	24.9	92.9	84.0

\* Carcass weight

\*\* Eviscerated basis

Note: Consumption of beef, pork and chicken in Québec were estimated.

Source: Statistic Canada, Cat. 32-229 (1996) and MAPAQ (1986-95)

**Table 9**  
**Quantitative semantic differential scale results on product quality and promotional activity**  
**(Wholesalers and retailers \*)**

Attributes	Alberta	US	Québec	Ontario	Significance Anova
<b>Overall beef quality</b>	2.71 (7) ***	1.71 (7)	1.17 (6)	1.17 (6)	
<b>Tenderness</b>	2.00 (7)	1.29 (7)	1.00 (6)	1.00 (6)	
<b>Meat color</b>	2.43 (7)	1.86 (7)	1.17 (6)	0.83 (6)	** (1)
<b>Aging</b>	2.33 (6)	1.67 (6)	0.20 (5)	0.20 (5)	** (2)
<b>Marbling</b>	1.14 (7)	1.00 (7)	-0.33 (6)	-0.17 (6)	
<b>Fat color</b>	2.29 (7)	0.57 (7)	0.50 (6)	0.50 (6)	
<b>Fat trim</b>	2.00 (7)	-0.43 (7)	1.83 (6)	0.83 (6)	** (3)
<b>Flavour</b>	2.14 (7)	1.29 (7)	0.50 (6)	0.83 (6)	
<b>Sanitary rules</b>	2.50 (6)	1.83 (6)	1.40 (5)	1.40 (5)	
<b>Price</b>	-0.17 (6)	1.00 (6)	1.00 (5)	1.20 (5)	
<b>Variety of cuts</b>	2.86 (7)	1.71 (7)	1.83 (6)	2.00 (6)	
<b>Product packaging</b>	2.43 (7)	2.14 (7)	0.67 (6)	0.67 (6)	
<b>Service (packers)</b>	2.67 (6)	1.00 (5)	2.00 (6)	1.33 (6)	
<b>Awareness of promotion (industry)</b>	1.43 (7)	-1.00 (7)	-0.33 (6)	-1.33 (6)	
<b>Awareness of promotion (government)</b>	0.43 (7)	-1.14 (7)	-1.33 (6)	-1.00 (6)	
<b>Effectiveness of promotion (industry)</b>	-0.71 (7)	-2.80 (5)	-1.67 (6)	-1.67 (6)	
<b>Effectiveness of promotion (government)</b>	-0.40 (5)	-2.75 (4)	-2.75 (4)	-2.75 (4)	**

\* Mean scores      \*\* Mean scores are statistically significantly different at 5% level      \*\*\* Number of respondents of each question  
(1) Mean scores are statistically significantly different between Alberta and Ontario at 5% level(2) Mean scores are statistically significantly different between Alberta and Québec and between Alberta and Ontario at 5% level(3) Mean scores are statistically significantly different between Alberta and the US and between the US and Québec at 5% level.

**Table 10****Quantitative semantic differential scale results on product quality and promotional activity  
(Restaurateurs\*)**

<b>Attributes</b>	<b>Alberta</b>	<b>US</b>	<b>Significance Anova</b>
<b>Overall beef quality</b>	2.32 (21) ***	0.60 (20)	**
<b>Tenderness</b>	2.24 (21)	1.05 (20)	**
<b>Aging</b>	2.14 (22)	1.16 (19)	**
<b>Marbling</b>	1.05 (22)	1.40 (20)	
<b>Fat color</b>	2.05 (22)	-0.26 (20)	**
<b>Fat trim</b>	1.86 (22)	0.35 (20)	**
<b>Flavour</b>	2.27 (22)	1.15 (20)	**
<b>Yield</b>	0.86 (22)	0.06 (19)	
<b>Price</b>	-1.05 (22)	0.55 (20)	**
<b>Service - Assistance</b>	1.58 (19)	1.31 (16)	
<b>Awareness of promotion</b>	0.64 (22)	-1.10 (20)	**
<b>Effectiveness of promotion</b>	0.40 (20)	-1.13 (15)	**

\* Mean scores

\*\* Mean scores are statistically significantly different at 5% level

\*\*\* Number of respondents of each question

## Figure 1 QUESTIONNAIRE (Retailers-wholesalers)

Name of organisation: \_\_\_\_\_

Name: \_\_\_\_\_

Position: \_\_\_\_\_

### Interview Preamble

The purpose of the study is to obtain a better understanding of expectations of the Québec beef buyers on product quality and marketing practices of the beef purchased from Alberta. The survey is voluntary and all individual replies are confidential.

### Example:

Automobile quality	<u>Excellent</u>	<u>Poor</u>
	<i>Japan</i> _____	
	<i>Germany</i> _____	

### **A) Product quality (end cuts: hips and chucks)**

1. Overall beef quality	<u>Excellent</u>	<u>Poor</u>
	<i>Alberta</i> _____	
	<i>US</i> _____	
	<i>Québec</i> _____	
	<i>Ontario</i> _____	

2. Tenderness	<u>Tough</u>	<u>Tender</u>
	<i>Alberta</i> _____	
	<i>US</i> _____	
	<i>Québec</i> _____	
	<i>Ontario</i> _____	

3. Meat color	<u>Bright red</u>	<u>Dark red</u>
	<i>Alberta</i> _____	
	<i>US</i> _____	
	<i>Québec</i> _____	
	<i>Ontario</i> _____	

4. Aging	<u>Adequate</u>	<u>Inadequate</u>
	<i>Alberta</i> _____	
	<i>US</i> _____	
	<i>Québec</i> _____	
	<i>Ontario</i> _____	

5. Marbling	<u>Abundant</u>	<u>Devoid</u>
	<i>Alberta</i> _____	
	<i>US</i> _____	
	<i>Québec</i> _____	
	<i>Ontario</i> _____	

6. Fat color Yellow White  
 Alberta \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 US \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Québec \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Ontario \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:

7. Fat trim Adequate Inadequate  
 Alberta \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 US \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Québec \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Ontario \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:

8. Flavour Tasteful Tasteless  
 Alberta \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 US \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Québec \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Ontario \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:

9. Food safety standards Low High  
 Alberta \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 US \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Québec \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Ontario \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:

10. Price Inexpensive Expensive  
 Alberta \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 US \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Québec \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Ontario \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:

11. Variety of cuts Narrow Broad  
 Alberta \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 US \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Québec \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Ontario \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:

12. Product packaging Adequate Inadequate  
 Alberta \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 US \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Québec \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Ontario \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:

**B) Promotional activity**

1. Service and assistance (packers) Excellent Poor  
 Alberta \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 US \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Québec \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:  
 Ontario \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_: \_\_\_\_\_:

2. a) Awareness of promotion (beef industry)	<u>Highly aware</u> Alberta _____: _____: _____: _____: _____: _____: _____: US _____: _____: _____: _____: _____: _____: _____: Québec _____: _____: _____: _____: _____: _____: _____: Ontario _____: _____: _____: _____: _____: _____: _____:	<u>Unaware</u>
b) Awareness of promotion (government)	<u>Unaware</u> Alberta _____: _____: _____: _____: _____: _____: _____: US _____: _____: _____: _____: _____: _____: _____: Québec _____: _____: _____: _____: _____: _____: _____: Ontario _____: _____: _____: _____: _____: _____: _____:	<u>Highly aware</u>
3. a) Effectiveness of promotion (beef industry)	<u>Effective</u> Alberta _____: _____: _____: _____: _____: _____: _____: US _____: _____: _____: _____: _____: _____: _____: Québec _____: _____: _____: _____: _____: _____: _____: Ontario _____: _____: _____: _____: _____: _____: _____:	<u>Ineffective</u>
b) Effectiveness of promotion (government)	<u>Ineffective</u> Alberta _____: _____: _____: _____: _____: _____: _____: US _____: _____: _____: _____: _____: _____: _____: Québec _____: _____: _____: _____: _____: _____: _____: Ontario _____: _____: _____: _____: _____: _____: _____:	<u>Effective</u>

**Supplemental questions**

1. What are the main characteristics you consider before making a beef purchasing decision?
2. If all the competitors offer items equal in price, quality and promotion, which province/country's beef product would you select ?
3. Could you give two reasons why you would buy US beef instead of Alberta/Western beef?
4. What should Alberta beef exporters do in order to compete against US imports in Québec?

Carcasses/box beef

5. Do you intend to purchase more box beef in the future? Please give your reasons.

Case ready

6. Would you prefer preparing your own case ready products or buying case ready products directly from the packers? Please give your reasons.

- If you prefer buying case ready products from the packers, which method would you prefer: MAP, master pack, or vacuum skin pack?

7. If you could introduce case ready beef in store, what would be the advantages and disadvantages for the retailer and the consumer ?

Branding

8. Do you think Alberta should brand its beef products in Québec?

If yes: What method (s) should it use to brand its products ?

If no : Please give your reasons.

Political issue

9. If Québec and Canada were separated, would you continue to buy your beef from Alberta or would you switch to other suppliers? Please give your reasons.

What changes do you foresee in the Québec beef market in the future, in the retail sector?



## Figure 2 QUESTIONNAIRE (Restaurants)

Name of organisation: \_\_\_\_\_

Name: \_\_\_\_\_

Position: \_\_\_\_\_

### Interview Preamble

The purpose of the study is to obtain a better understanding of expectations of the Québec beef buyers on product quality and marketing practices of the beef purchased from Alberta. The survey is voluntary and all replies are confidential.

### Example:

Automobile quality	<u>Excellent</u>	<u>Poor</u>
	<i>Japan</i> _____: _____: _____: _____: _____: _____: _____	
	<i>Germany</i> _____: _____: _____: _____: _____: _____: _____	

### **A) Product quality (middle cuts: loins and ribs)**

1. Overall beef quality	<u>Excellent</u>	<u>Poor</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

2. Tenderness	<u>Tough</u>	<u>Tender</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

3. Aging	<u>Adequate</u>	<u>Inadequate</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

4. Marbling	<u>Abundant</u>	<u>Devoid</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

5. Fat color	<u>Yellow</u>	<u>White</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

6. Fat trim	<u>Adequate</u>	<u>Inadequate</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

7. Flavour	<u>Tasteful</u>	<u>Tasteless</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

8. Yield	<u>Low</u>	<u>High</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

9. Price	<u>Inexpensive</u>	<u>Expensive</u>
	<i>Alberta</i> _____: _____: _____: _____: _____: _____: _____	
	<i>US</i> _____: _____: _____: _____: _____: _____: _____	

**B) Promotional activity**

1. Service and assistance	<u>Excellent</u>		<u>Poor</u>
	Alberta	____: ____: ____: ____: ____: ____: ____	
	US	____: ____: ____: ____: ____: ____: ____	
2. Awareness of promotion	<u>Highly aware</u>		<u>Unaware</u>
	Alberta	____: ____: ____: ____: ____: ____: ____	
	US	____: ____: ____: ____: ____: ____: ____	
3. Effectiveness of promotion	<u>Effective</u>		<u>Ineffective</u>
	Alberta	____: ____: ____: ____: ____: ____: ____	
	US	____: ____: ____: ____: ____: ____: ____	

**2) Supplemental questions**

1. What are the main characteristics you consider before making a beef purchasing decision?
2. If all the competitors offer items equal in price, quality and promotion, which province/country's beef product would you select ?
3. Could you give two reasons why you would buy US beef instead of Alberta/Western beef?
4. What should Alberta beef exporters do in order to compete against US imports in Québec ?

Carcasses/box beef (only for purveyors)

5. Do you intend to purchase more box beef in the future ? Please give your reasons.

Portion cuts

6. Has your beef supplier introduced portion cuts?  
- If no: Do you have any interest in using portion cuts? Please give your reasons.
7. Are the portion sizes consistently too large, too small or just the right for your business?

Branding

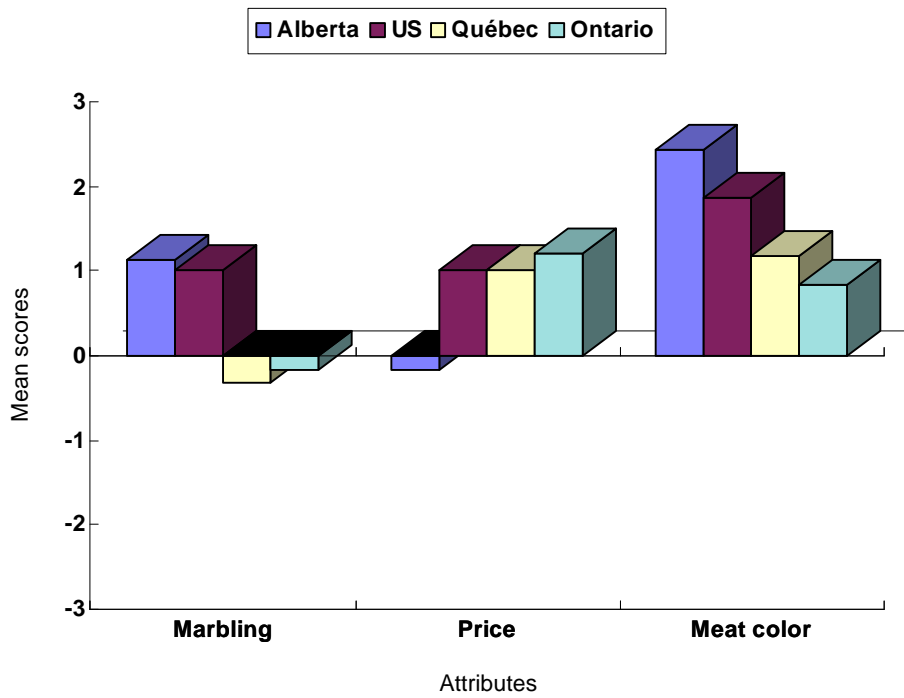
8. Do you think Alberta should brand its beef products in Québec?  
If yes: What method (s) should it use to brand its products ?  
If no : Please give your reasons.

Political issue

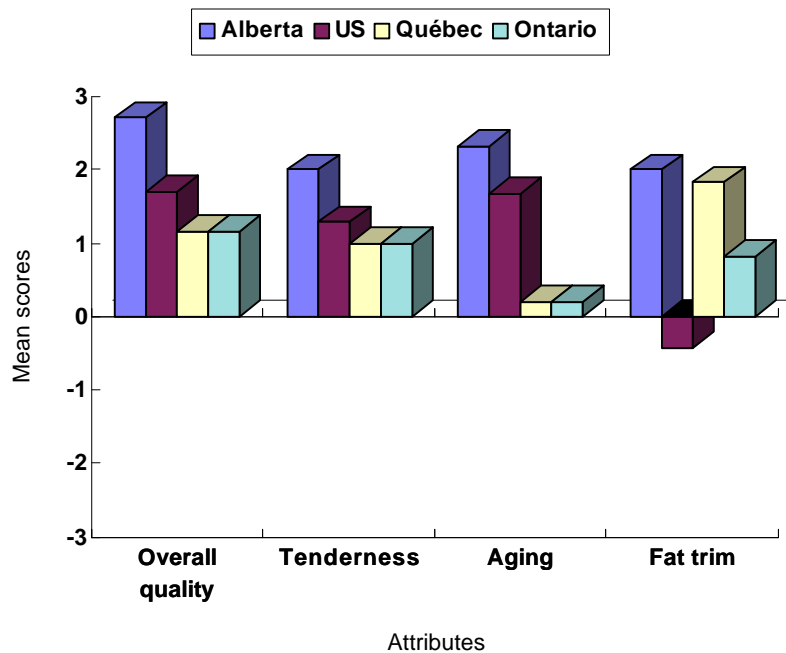
9. If Québec and Canada were separated, would you continue to buy your beef from Alberta or would you switch to other beef suppliers? Please give your reasons.

10. What changes do you foresee in the Québec beef market in the future, in the HRI sector?

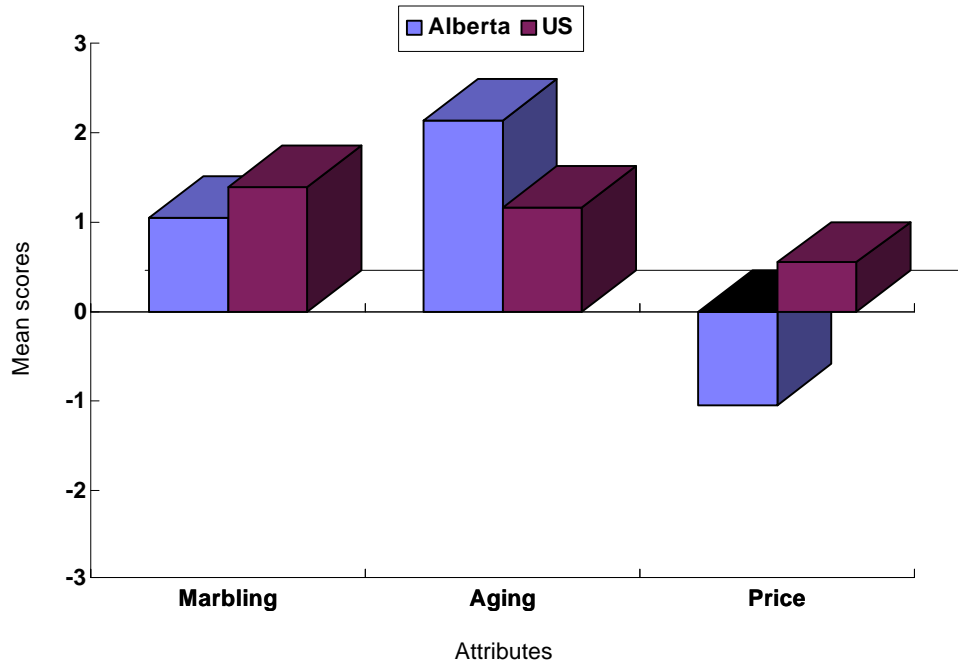
**Figure 3 (Wholesalers and Retailers)**  
**Semantic differential scale results of the survey on marbling, price and meat color**



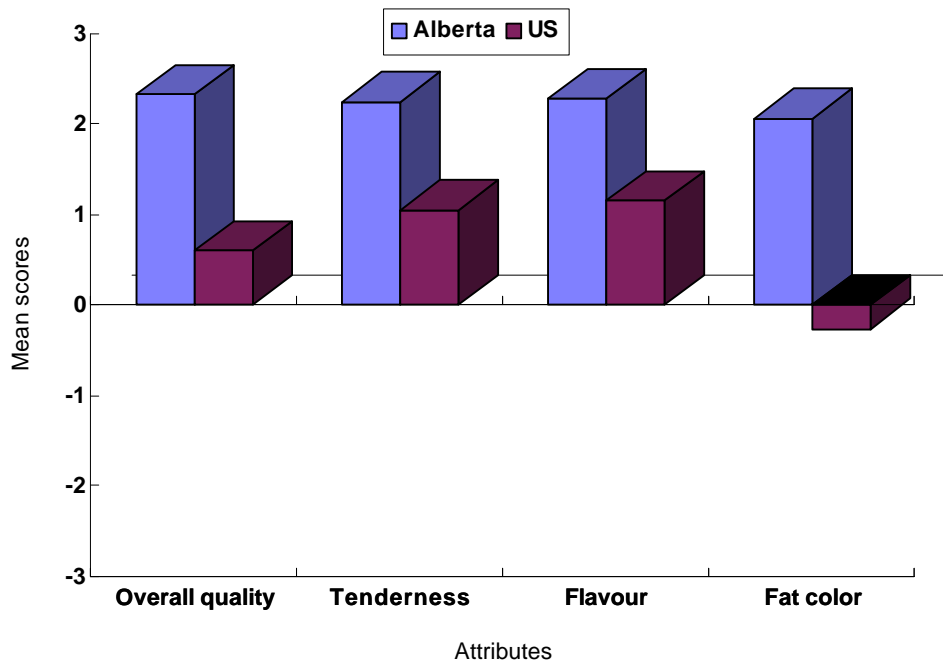
**Figure 4 (Wholesalers and Retailers)**  
**Semantic differential scale results of the survey on selected attributes**



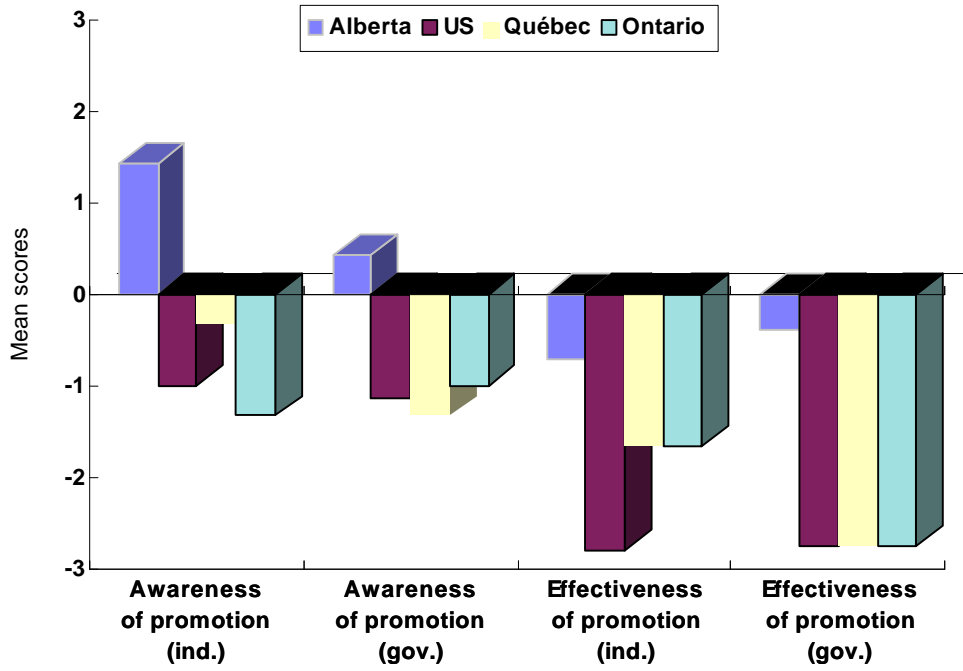
**Figure 5 (Restaurateurs)**  
**Semantic differential scale results of the survey on marbling, aging and price**



**Figure 6 (Restaurateurs)**  
**Semantic differential scale results of the survey on selected attributes**



**Figure 7 (Wholesalers and retailers)**  
**Semantic differential scale results of the survey on promotional activity**



**Figure 8 (Restaurateurs)**  
**Semantic differential scale results of the survey on promotional activity**

