

Canadian Agri-Food Policy Institute (CAPI)
L'Institut canadien des politiques agro-alimentaires (ICPA)
960 Carling Avenue, CEF
Building 49, Room 318
Ottawa, Ontario
K1A 0C6

Disclaimer:

This paper was commissioned in March 2005 by CAPI as part of its Farm Income Project. The views expressed in this paper are those of the author(s) and do not necessarily reflect the views of CAPI and its Board of Directors.

Although we strive to make the information in this document helpful and accurate, it is done so without warranties of any kind, either expressed or implied. The Canadian Agri-Food Policy Institute (CAPI) does not warrant or make any representations regarding the use of the information in this document and its correctness, accuracy, reliability or otherwise, and disclaim all liability of any kind whatsoever arising out of use of such information or errors or omissions in this document.

The report is the property of CAPI. Other parties can use the contents of this paper as long as CAPI is appropriately referenced.

***FOOD PROCESSING –
A STRATEGIC CANADIAN INDUSTRY***

submitted by
SCOTT WOLFE MANAGEMENT INC

prepared on behalf of the
Canadian Agri-Food Policy Institute

May, 2005

Draft Discussion Document



TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| 1.0 INTRODUCTION | 1 |
| 1.1 <i>Context of the Project</i> | 1 |
| 1.2 <i>Project Objective and Method</i> | 2 |
| 2.0 PROFILE OF CANADA'S FOOD PROCESSING SECTOR | 4 |
| 2.1 <i>Gross Domestic Product</i> | 5 |
| 2.2 <i>Number of Establishments</i> | 7 |
| 2.3 <i>Size of Establishments</i> | 8 |
| 2.4 <i>Employment</i> | 9 |
| 2.5 <i>Ownership</i> | 10 |
| 2.6 <i>Investment and Innovation</i> | 10 |
| 2.7 <i>Food Industry Economic Value Chain</i> | 11 |
| 2.8 <i>Profitability</i> | 13 |
| 2.9 <i>Exports of Food Manufactured Products</i> | 13 |
| 2.10 <i>Exports of Raw Agricultural Products</i> | 14 |
| 2.11 <i>Imports of Food Manufactured Product</i> | 14 |
| 2.12 <i>Federal Public Programming</i> | 15 |
| 3.0 STRATEGIC ISSUES FACING THE CANADIAN FOOD PROCESSING INDUSTRY | 16 |
| 3.1 <i>Demand for Safe, Quality Products</i> | 17 |
| 3.2 <i>Protectionist International Markets</i> | 17 |
| 3.3 <i>Minimal Market Power</i> | 17 |
| 3.4 <i>Canada's Capabilities and Capacity</i> | 18 |
| 3.5 <i>Product Opportunities</i> | 19 |
| 3.6 <i>Incentives for Industry Development</i> | 19 |
| 3.7 <i>Impact of the Food Processing Sector on the Agriculture Industry in Canada</i> | 20 |
| 3.8 <i>Summary of Strategic Importance</i> | 21 |
| 4.0 POLICY DEVELOPMENT OPPORTUNITIES | 22 |
| APPENDIX A: SOURCES OF INFORMATION | 1 |
| APPENDIX B: DATA TABLES | 1 |
| APPENDIX C: EXISTING RELEVANT FEDERAL PUBLIC SECTOR PROGRAMMING | 1 |

1.0 INTRODUCTION

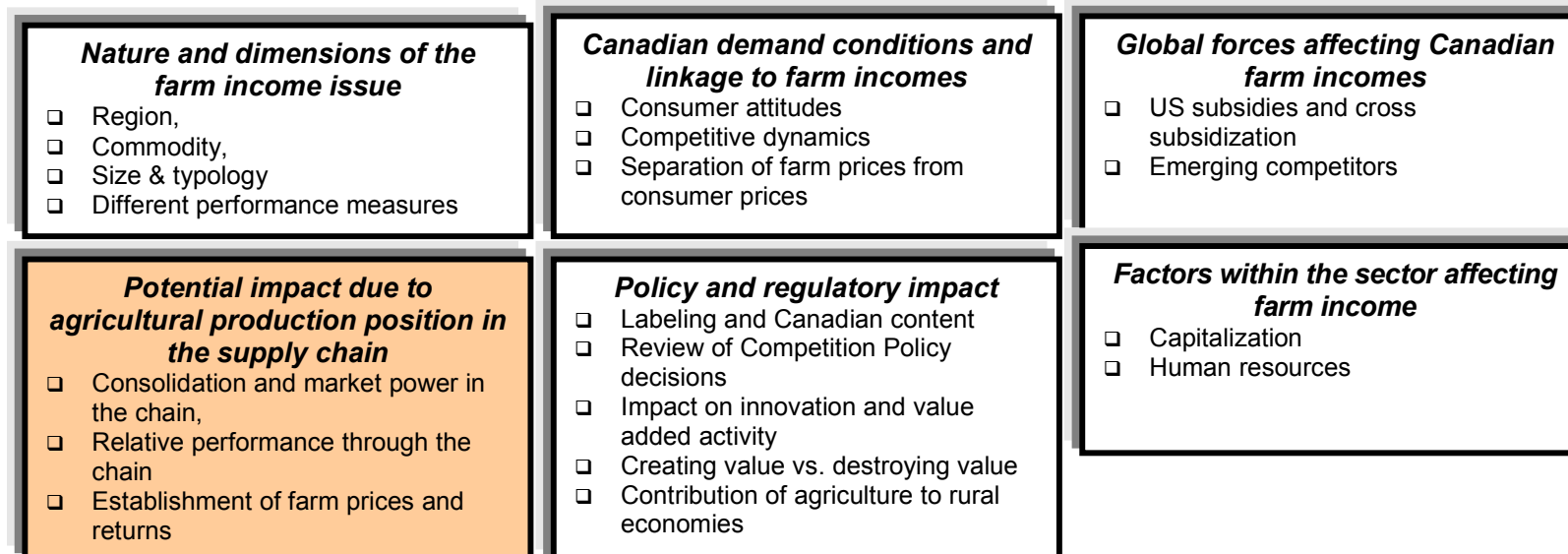
1.1 Context of the Project

The Canadian Agri-Food Policy Institute (CAPI) is focusing on the problem statement:

“what is the nature of the farm income issue and what are the contributing factors.”

Given the desire to improve farm income prospects, there is need to understand the real declines in net farm income, and to develop long-term approaches to improving farm income prospects. Investigation and analyses have been commissioned focused on the interrelationship between six areas requiring further understanding:

- ❑ the nature and dimensions of the farm income issue;
- ❑ global forces affecting Canadian farm incomes;
- ❑ Canadian demand conditions and linkage to farm incomes;
- ❑ any differential impacts due to production agriculture’s position in the supply chain;
- ❑ factors within the agriculture sector that can affect farm income; and,
- ❑ the policy and regulatory environment within which the sector operates.



This paper contributes to the knowledge and understanding of the potential impact due to agricultural production's position in the food supply chain.

1.2 Project Objective and Method

The strategic issues inherent to the food processing in Canada have significant potential impact to Canadian agriculture. This paper assists in evaluating the potential impacts to Canadian agricultural production from supply chain dynamics. It is one of four papers intended to assist CAPI in further understanding supply chain issues. The overall purpose of this paper is:

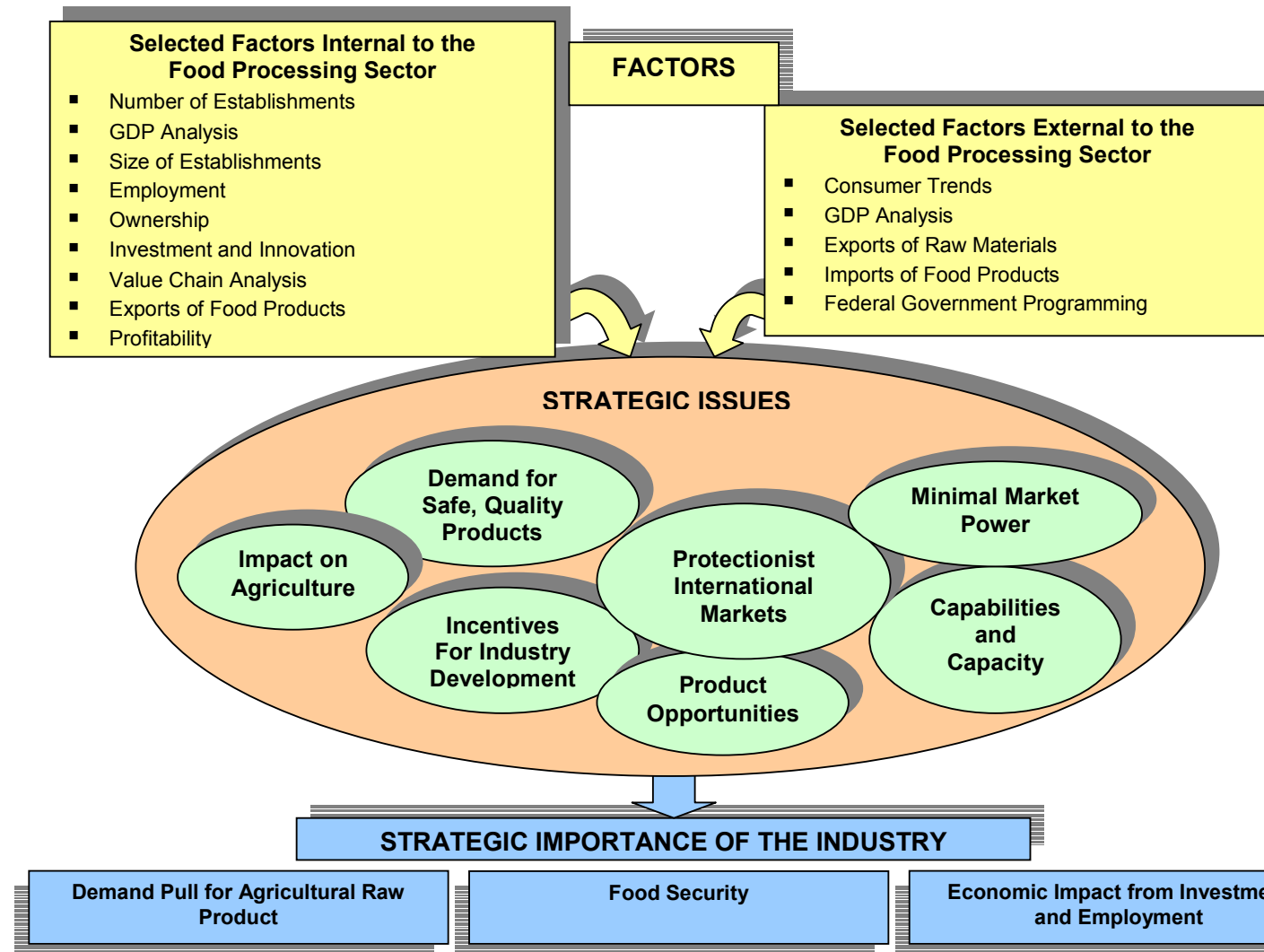
- *to provide a background document for CAPI to realize the strategic importance of food processing in Canada in order to appropriately influence public policy direction.*

...and addresses such issues as:

- definition and scope of the sector;
- the contribution (jobs, GDP, etc.) of the food-manufacturing sector to Canada and its regions compared to other prominent sectors such as the auto sector;
- the strategic elements / issues of Canada's food processing sector important to its future development;
- factors which need to be considered in the development of a strategic development plan for the sector, i.e.
 - current capabilities in such areas as human resources, infrastructure (public sector) to assist in the development of the sector;
 - market demand trends;
 - current ownership of major food processing sectors in Canada;
 - where current Canadian agricultural production is currently being processed; and,
 - relevant public sector programming in place to assist the sector;
- the trends in food processing and manufacturing activity in Canada, i.e. contribution, growth areas, mature sub-sectors, geographic factors;
- the impact of the sector on the agriculture industry in Canada; and,
- identification and assessment of the strategic issues that need to be considered to maintain a viable food-processing sector in Canada.

The project's methodology included a review of relevant documents and web sites, as well as discussions with selected agri-food industry managers (see Appendix A for a listing of sources of information). This documentation review and discussions with managers is the basis for the profile of the sector, the identification and description of the strategic issues, and the summary of the strategic importance of Canada's food processing sector in this report.

The results of the analyses are presented in three components: the **factors** used to profile the industry sector; the **strategic issues** identified from those factors; and, the summary of the **strategic importance** of the food manufacturing sector.



2.0 PROFILE OF CANADA'S FOOD PROCESSING SECTOR

The food processing sector in Canada includes the primary processing of commodities in bulk form into intermediate¹ products, i.e. fat cattle into boneless fresh beef, market hogs into fresh and frozen pork, as well as the further processing of intermediate products into consumer² products, i.e. food preparation ingredients, biscuits and crackers, french fries.

The sector is the country's third-largest employer; it is one of the country's top five industries, in terms of economic impacts, and accounts for more than 9 per cent of Canada's manufacturing sector Canadian Gross Domestic Product (GDP). At approximately \$20 billion, the food manufacturing sector is 1.5% of Canada's total GDP, with GDP currently measured at \$1.3 trillion.

The sector is continuously growing. In the past 10 years, total exports have almost doubled and exports of processed food products have more than tripled, now exceeding those of unprocessed bulk commodities. Canada exports a wide-range of products to more than 175 trading partners around the world; value of agri-food exports, including seafood, exceeds \$30 billion annually. Value-added and processed goods, combined with meat, live animals, bulk grains, oilseeds and vegetables are Canada's top agriculture and food exports. Other important export foods include milk products; fish and seafood; maple syrup and honey; organic, natural and health foods; and confectioneries and beverages. The United States represents over 65% of our export market for agri-food products.

However, Canada's food sector is not a significant world trade player. Canada's exports of agri-food and seafood products exceed \$30 billion per annum, while Canada's imports exceed \$23 billion per annum. As a ratio of world trade, Canada's agri-food sector represents from 4% to 5% of worldwide agri-food sector trade³.

Further, Canada's agri-food and seafood trade as a ratio of the country's total trade (calculated at 6.7%), is estimated to be below the average (estimated at 7.5%) of other industrialized countries⁴.

In terms of ownership and control, it appears to many that Canada is losing its food-processing sector.

Food processing is a strategic industry for Canada, as it:

- ❑ provides food security;
- ❑ creates many jobs across the country; and,
- ❑ creates a demand pull for farm products, resulting in fewer products being exported in an un-processed form.

¹ Term used in the collecting and reporting of data by Statistics Canada

² Term used in the collecting and reporting of data by Statistics Canada

³ World Trade Organization

⁴ IBID

Analysis of a number of factors is important to identifying key strategic issues facing the industry. These include:

**Selected Factors Internal to the
Food Processing Sector**

- Number of Establishments
- GDP Analysis
- Size of Establishments
- Employment
- Ownership
- Investment and Innovation
- Value Chain Analysis
- Exports of Food Products
- Profitability

**Selected Factors External to the
Food Processing Sector**

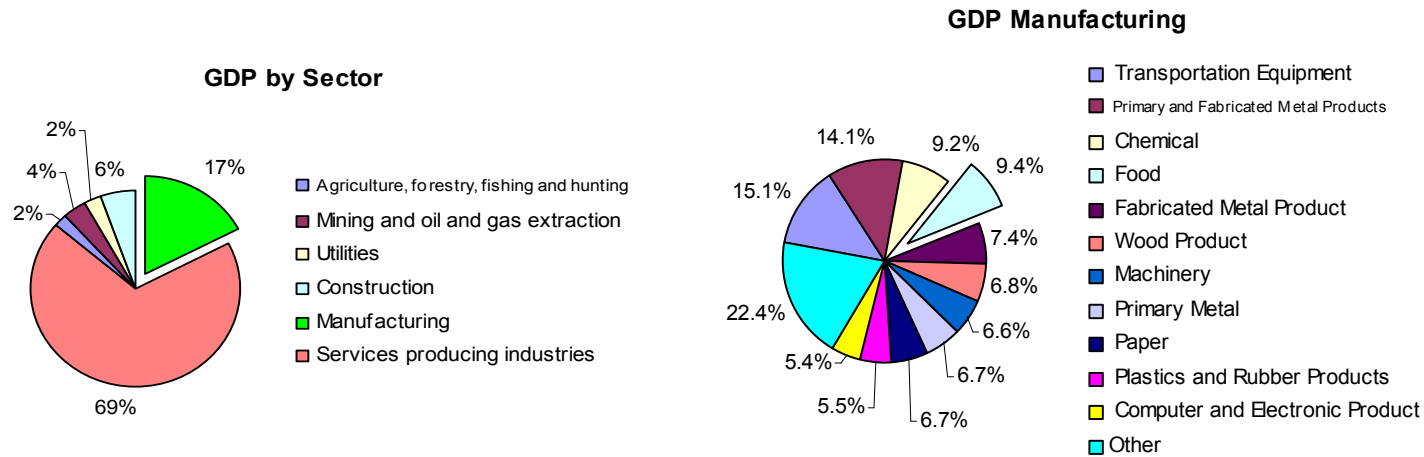
- Consumer Trends
- GDP Analysis
- Exports of Raw Materials
- Imports of Food Products
- Federal Government Programming

Each of these factors is assessed; observations and key findings are summarized in the following sections.

2.1 Gross Domestic Product

Food processing is a significant economic engine in Canada.

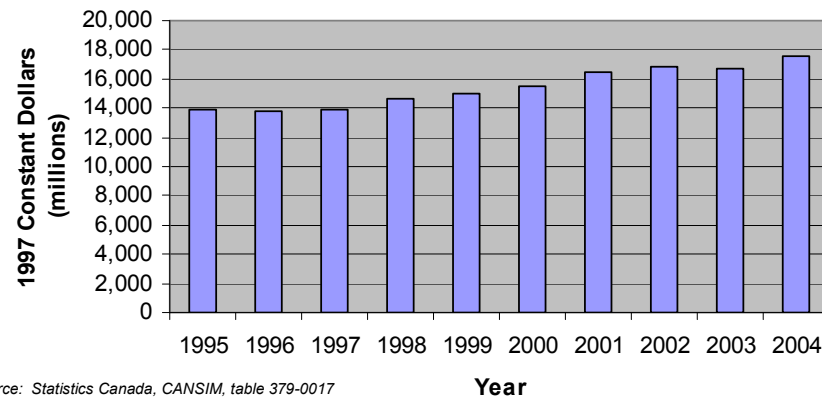
Manufacturing represents an estimated 17% of Canada's total GDP of \$1.3 trillion. Within the manufacturing sector, food manufacturing represents approximately 9.4% of the GDP; thus, food processing represents an estimated \$20 billion, or approximately 1.5% of Canada's total GDP, as measured by average GDP from 2000 to 2004. Within manufacturing, food processing is the same level of economic activity as generated by the chemical manufacturing sector in Canada, and is only less than two other defined manufacturing categories: primary and fabricated metal products manufacturing (14.1%), and transportation equipment manufacturing (13.9%). Reference data is provided in Appendix B.



Source: Statistics Canada, CANSIM, table 379-0017

The Gross Domestic Product increased an average of 3.1% per annum in the food manufacturing sector from the year 2000 to 2004. *Sugar and confectionery product manufacturing* was the highest growth (6.6% per annum) sector in the food manufacturing category, followed by *bakeries and tortilla manufacturing* (5.3% per annum). *Grain and oilseed milling* (0.3% per annum) and *animal food manufacturing* (1.1% per annum) were the lowest growth categories in the food manufacturing sector.

GDP at Basic Prices - Food Manufacturing



Source: Statistics Canada, CANSIM, table 379-0017

Growth trends indicate lower growth when considering 10 years of data. The 10 year average rate of growth approximates 2.7% per annum for the food manufacturing sector, primarily due to limited growth from 1995 to 1998.

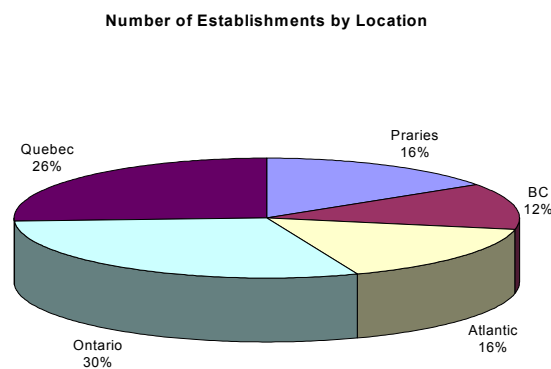
Food manufacturing has above average growth (3.1% versus 2.2%) when compared to all other industries growth in GDP from 2000 to 2004.

2.2 Number of Establishments

There are many establishments involved in food manufacturing, regionally dispersed across Canada.

There are an estimated 10,500 establishments in total in Canada, including those businesses which do not have employees or do not have sales exceeding \$30,000 per annum. Within this group, there are approximately 5,500 active food manufacturing establishments⁵ in Canada, representing approximately 10% of all manufacturing establishments who employ workers in Canada. This percentage has remained relatively constant the past ten years. Bakeries and tortilla manufacturing, meat product manufacturing, dairy and seafood product preparation and packaging are the four largest food manufacturing sectors, in terms of numbers of establishments.

The importance of the sector is national in scope, which is evident looking at the number of active food manufacturing establishments by region.



Source: Statistics Canada, CANSIM

⁵ Incorporated establishments with employees, primarily engaged in manufacturing and with sales equal or greater than \$30,000

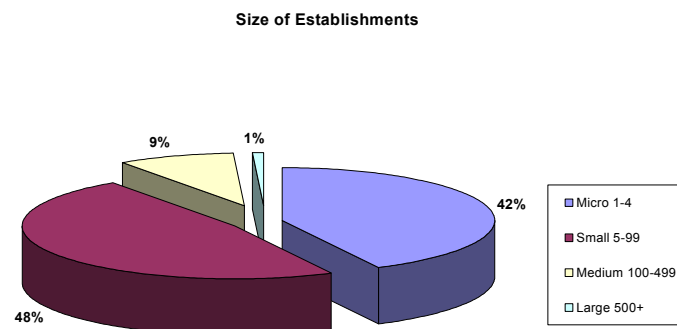
2.3 Size of Establishments

**Canadian food manufacturers are, on average, small enterprises.
Canada's food processing sector is heavily skewed to a large number of small players.**

Statistics Canada data also provides indicative measure for the food manufacturing sector's profile of employment. 42% of the food manufacturing businesses in Canada have less than 4 employees. Over 90% have less than 99 employees. Approximately 9% of the businesses have from between 100 and 499 employees, and 1% of the firms have over 500 employees. There are a considerable number of small businesses in the food manufacturing sector. Food manufacturing sectors that have the larger percentage of larger-sized employers include sugar and confectionary, meat manufacturing, fruit and vegetable processing, and seafood product preparation.

Internationally, there continues to be an evolution of consolidation, rationalization, spinning off of new companies, emerging of new companies. This transformation is continuous with even the biggest of the big companies getting bigger to seek economies of scale, market share of certain market segments, elimination of competition (i.e. the elimination of the Nabisco, General Mills, Robin Hood names from the marketplace), and product innovations. Seeking cost efficiencies, expanding market share, building upon brand recognition, new product development, new packaging, and others, are key positioning strategies that all enterprises are seeking to develop and implement to improve returns from the market place.

Compared with other Canadian manufacturing industries, food manufacturing has a slightly higher percentage of smaller enterprises. Industries such as auto and aerospace manufacturing have a higher concentration of employment in the Ontario-Quebec regions, and have a larger number of significant employer companies.



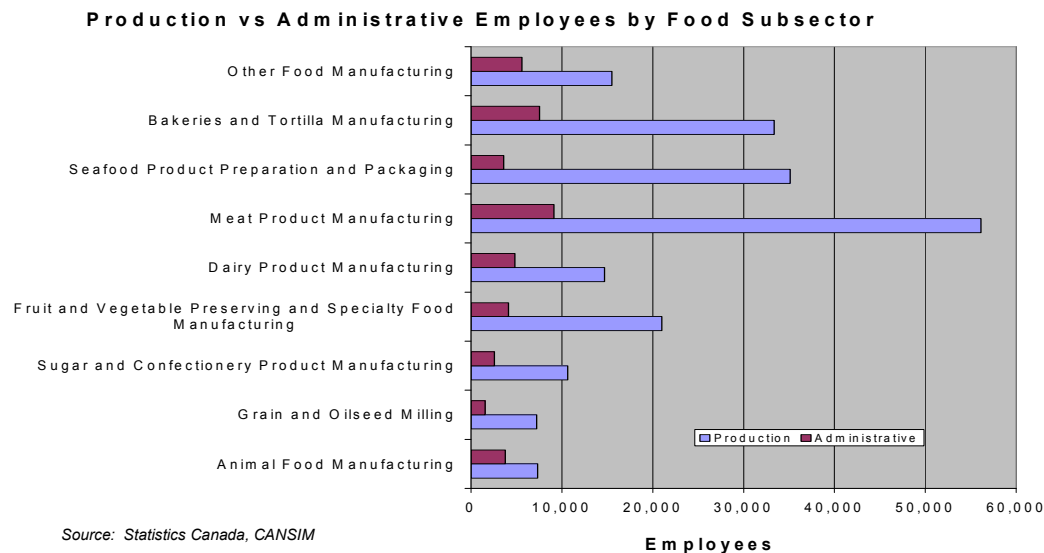
Source: Statistics Canada, CANSIM

2.4 Employment

The food processing sector is a significant employer, particularly in production-related jobs.

Approximately 14% of all employment in Canada is in the manufacturing sector. Within the manufacturing sector, 12% of employees are working in the food sector; thus approximately 1.8% of all employment in Canada is in the food manufacturing sector (approximately 275,000 employees). Meat product, bakeries and tortilla, seafood and fruit and vegetables account for over 50% of the employees in the food manufacturing sector. Combined with approximately 325,000 agriculture employment, the food processing and agriculture industry employs an estimated 600,000 in Canada.

Only the fruit and vegetable manufacturing sector indicates wage rates increases at or above the total manufacturing industry average in terms of increased wages from 1993 to 2002. Overall, the food manufacturing sector's 2% annual compound growth rate from 1993 to 2002 is less than half of the growth rate experienced by all of the manufacturing in Canada. In part this is due to the larger than average ratio of production-related age earners in the food sector. Over 82% of employees in the food manufacturing sector are production-related workers, versus 78% for all of manufacturing in Canada.



2.5 Ownership

There are few Canadian owned and controlled, vertically integrated, significant players in the food processing sector.

There are a few Canadian-based organizations of world scale size and market power. Based on 2001 reported sales data, Canada has 4% of the largest 100 food companies in the world based in Canada; these are McCain Foods Limited (57th), Maple Leaf Foods Inc. (69th), George Weston Limited (84th), and Saputo Inc. (95th)⁶. The industry is essentially influenced and controlled by U.S. (37% of the largest 100), European (31% of the largest 100), and Japanese-based (19% of the largest 100), publicly-owned and privately-owned food manufacturing enterprises. While many of these foreign-controlled companies have a significant Canadian presence, the decision-making is rarely based upon the relatively insignificant market (supply or demand) within Canada. Production and distribution-related assets, investment, and employment from these foreign controlled companies are significant components of the food manufacturing sector in Canada.

There are a significant number of small family-owned enterprises in Canada. These firms are typically characterized by limitations in financial capital, and more importantly, limitations in their ability to attain shelf space for their products in the distribution and retail sector. As in many manufacturing sectors, the Canadian food manufacturers rely largely upon product development and innovation to enable product introduction and ongoing competitiveness. While there are many small company successes in Canada, smaller enterprises often have their products and/ or ideas bought out by foreign-owned enterprises.

The market power of the integrated manufacturers/distributors/retailers also has often forced Canadian manufacturers into private label manufacturing roles.

Consolidation and rationalization of the Canadian food manufacturing sector is a continuing trend that involves the complete range of enterprises found in Canada. Sparling and van Duren (2002) noted that the majority of Canadian consolidation from 1996 to 2000 was from Canadian companies acquiring other Canadian companies. They also noted that new competitors often emerge from convergence within the industry.

2.6 Investment and Innovation

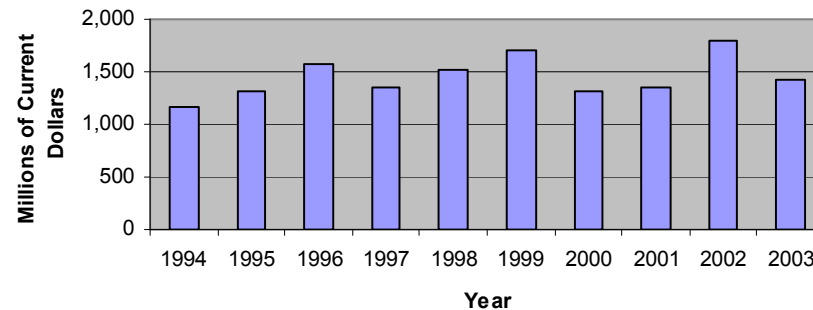
**Canadian food manufacturing, as an industry,
is not driving growth based investment in product research and technology.**

Investment is believed to represent the amount of innovation and product development that is occurring within an industry; for the food industry, investment would lead to greater development of food product development. Over the past decade, most sub-categories in food manufacturing showed flat to decreasing investment trends; and only the grain and oilseed category showed

⁶ Global Food Market Database, Leatherhead Food International

significant increases in investment, driven by the over 10% increases in the vegetable oil (except corn oil) category. These numbers suggest that Canadian food manufacturers are not spending more money on new equipment and product development than they were a decade ago, with the exception of a few categories.

Capital Investment in the Food Processing Sector



Sources: Statistics Canada, CANSIM: Table 029-0009

Statistics Canada data for capital investment in the food processing sector does not indicate any growth in investment in the sector.

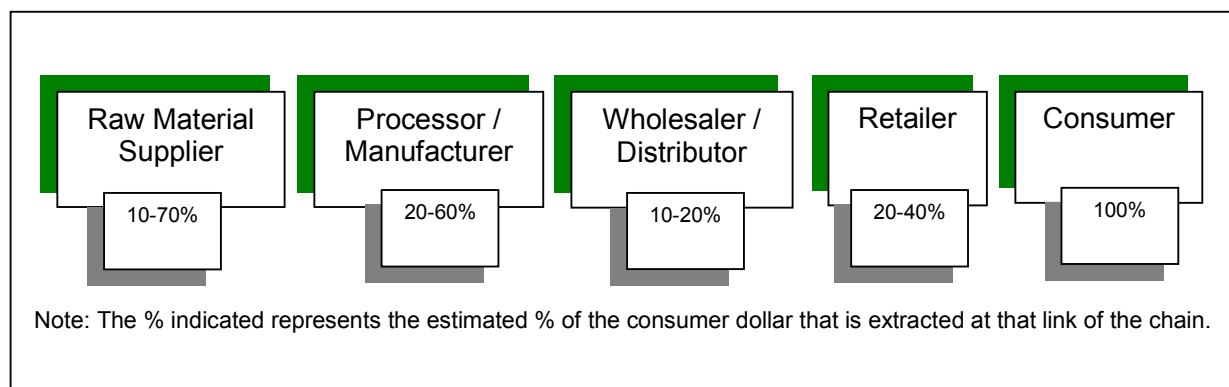
2.7 Food Industry Economic Value Chain

The food processor represents from 20% to 60% of the value-added from raw to consumed product.

The value chain consists of a number of firms and the relationships between those firms that govern the flow of a product from the production of the raw material to processing to manufacturing and distribution to the consumer.

A traditional food industry value chain consists of the Farmer, Processor, Wholesaler, Retailer and Consumer, and is presented in below.

Economic Value Chain Model for the Food Industry



Source: *Potential Benefits of Functional Foods and Nutraceuticals to the Agri-Food Industry in Canada*, MISB, Agriculture and Agri-Food Canada (AAFC), March 2002

The percentage ranges in the model indicate the estimated amount of processing that is involved in the manufacture of various foods. The more processing required, the greater the percentage in the processor/manufacturer box, and the less available for the raw material supplier. For example, the value chain for unprocessed meat products would include 23% for retailers, 11% for wholesalers, and 14% for manufacturers, leaving 52% for raw materials producers. The bread and bakery products value chain would provide 40% for retailers, 18% for wholesalers, 17% for manufacturers, and 5% for grain processors leaving only 20% for raw materials suppliers⁷.

The range for the wholesaler/distributor depends on the transportation and storage requirements of the products. Frozen storage and transport would require a greater contribution to wholesalers, distributors, and retailers than would bulk dry goods. The value extracted by retailers would also be driven by the perishable nature of the product.

The range in retail is dependent upon the market power of the retailer and competitive issues in the consumer market.

Shipments (domestic sales and exports) from Canadian food manufacturing enterprises represent over \$63 billion in value. This represents an average of over 5% compound annual growth from 1993 to 2002; all of Canadian manufacturing compound annual growth compares at 6.8%.

⁷ Potential Benefits of Functional Foods and Nutraceuticals to the Agri-Food Industry in Canada, MISB, Agriculture and Agri-Food Canada

2.8 Profitability

Canada's food processing sector is generally viewed as achieving lower profitability than global, international players.

The secondary, or further processing, or consumer-oriented, processing of food is generally recognized as more profitable versus the primary, or intermediate, stages of food processing. Canada's processing sector is primarily focused on the primary processing of raw product, i.e. meat manufacturing, skim milk powder and butter manufacturing, raw seafood packaging.

Industry Canada's manufacturing intensity ratio⁸ for the food manufacturing sector illustrates a decline from 1993 to 2002; this is generally viewed as a measure of decline in the profitability of the value-adding activity over the ten year period.

Limited increased profitability opportunities will remain in the primary processing of meat, poultry, milk, grains, and oilseeds.

2.9 Exports of Food Manufactured Products

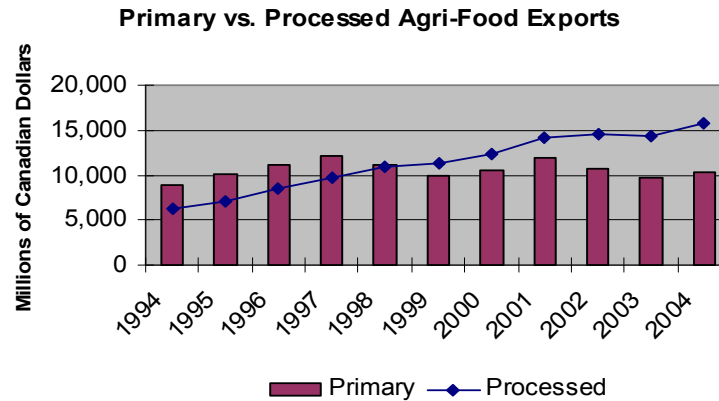
Canadian exports of food manufacturing products exceed \$18 billion annually.

Exports of Canadian food manufactured product increased an average of 6.7% per annum from 2000 to 2004 and exceeded \$18 billion in 2004. The data indicate that exports are growing faster than production. Agriculture and food exports are considered a top ten industry sector in exports and are exceeded by automotive, energy, industrial products, machinery and equipment, and forestry. Agriculture and food products account for 3 to 5% of the value of Canadian exports.

Approximately 25% of all shipments from Canadian food manufacturing enterprises are now exported. This percentage continues to grow with increased food manufacturing output and the largest growth opportunities outside of Canada.

The following graph illustrates the increased exports of processed food product from Canada since 1994. This trend is particularly important in view of the stable to declining exports of raw primary agriculture product.

⁸ calculated by dividing manufacturing value-added by manufacturing shipments



Source: Statistics Canada data retrieved from CATS

2.10 Exports of Raw Agricultural Products

Total raw product exports have declined in recent years.

As illustrated in the above graph, increased worldwide production and competition, coupled with increasing international trade restrictions, have reduced the value (using constant 2000 dollars) of raw animal and animal product exports from 2000 to 2004 by an average of 9.6% per annum. Hogs (14% per annum) and poultry (9.8% per annum) have enjoyed increases, while all other species sectors have declined. Grain and oilseed exports (using constant 2000 dollars) have remained approximately constant (averaged 0.6% increase per annum from 2000 to 2004).

The United States market accounts for over 65% of our exported product.

2.11 Imports of Food Manufactured Product

Imports have increased an average of 6% per annum; imports are mostly of higher-value product.

Imports of agri-food products exceed \$20 billion. This has increased from approximately \$15 billion over the past ten years and is an average of approximately 4% per annum increases in agriculture and food product imports. Product from the United States represents 60% of the agri-food imports into Canada.

Imported product is largely higher-value further processed product in all commodity sectors. The top imports include wine, food preparations, biscuits and crackers, soybean, dog or cat food, fresh grapes, beer, mixtures the food or drink industries, and chocolate and preparations.

2.12 Federal Public Programming

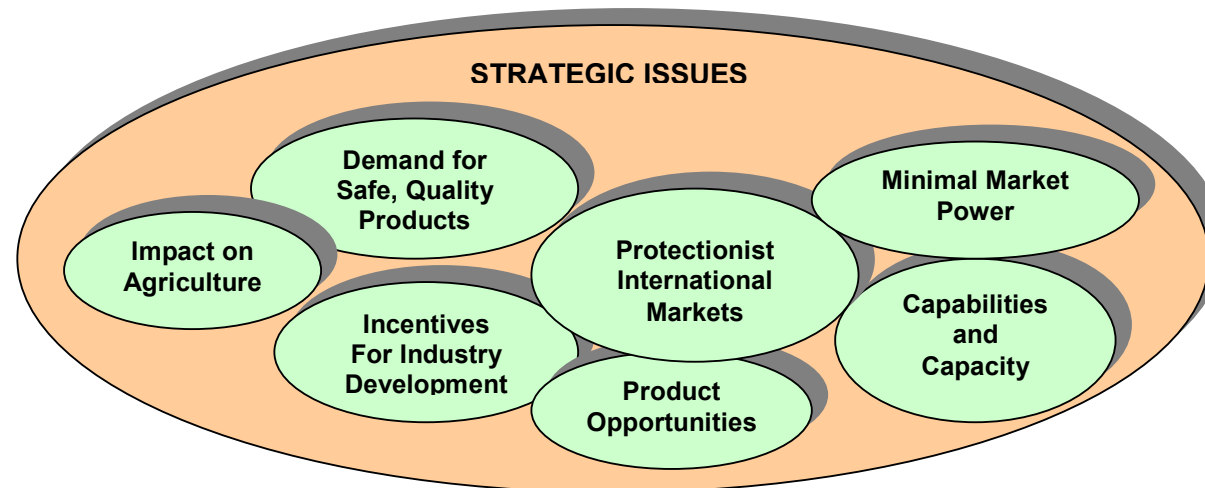
This level of government programming suggests the Canadian federal government considers the agriculture and food sectors as strategically important.

Appendix C lists a number of current federal government sponsored programs available to the food processing sector. Existing programming is intended to encourage investment, develop and implement quality-control and quality management systems, develop new value-added product at the farm and primary processing levels, and commercialize new product innovations. Investment is primarily being encouraged for the further development of non-food bio-based product and manufacturing capabilities, i.e. bio-refineries, fibre plants. A secondary target area for investment and development has been in the area of nutraceuticals and functional foods.

As described, there are many important factors inherent in the food processing sector which provide a base of knowledge for the assessment of the strategic importance of the sector. Of most significance is the large economic significance (food processing represents an estimated \$20 billion, or approximately 1.5% of Canada's total GDP, as measured by average GDP from 2000 to 2004) and employment (600,000) within the sector in Canada, Canada's increasing value-added component (larger proportion of processed food product exports, versus bulk / primary products), and the tiered structure of the sector (large number of small food processing enterprises; significant number of manufacturing and distribution operations of foreign owned and controlled enterprises; and the small number of Canadian owned and controlled global players in the food industry).

3.0 STRATEGIC ISSUES FACING THE CANADIAN FOOD PROCESSING INDUSTRY

Key strategic issues can be identified from the analyses of the factors, and summarized as follows:



Food manufacturing is critical to a national food security policy. The sector also creates demand pull for Canadian agricultural production, resulting in less reliance on world commodity markets. The economic impacts from the sector, as indicated in the employment and investment-related analyses in the previous section, are substantial.

As such, the food processing sector is significant to Canada's economy. The industry may be as strategic, if not more, to the Canadian economy as aerospace or the auto sector. Food manufacturing is Canada's 3rd most significant category of manufacturing. However, it is becoming much less significant when Canadian food processors' market share of Canada's food product supply is considered; Canadian-based food companies, when considered as a group, are believed not to be gaining market share in Canada, or in the US market. Opportunity exists to process the considerable raw product grown and raised in Canada; there remain over \$10 billion of raw product exports from Canada each year.

Canada has excellent access to such industry development requirements as raw material supply, transportation and quality control infrastructure, and human resources. Lacking is market access and power for Canadian commercial enterprises to grow based on international market success.

Strategic issues facing the Canadian sector include:

3.1 Demand for Safe, Quality Products

- Consumers increasingly demand safe, quality food, with significant choice and reasonable value. Farm sector, processing sector, distribution and retail need to work more closely together in the future to enable the tracking and tracing of agriculture and food products.
- Enabling the guarantee of safe quality food will not be viewed as a competitive advantage in the future, but will be a minimal requirement to be a food supplier to the world markets.

3.2 Protectionist International Markets

- Dependence upon international markets for Canadian raw agricultural product is increasingly risky. Protectionist actions, pertaining in large part to food safety concerns, will continue to restrict export market access. Canada's reliance on the US market further exasperates the issue. Relying on any one significant international market has increased risk. Canadian enterprises must further build other markets. More importantly, Canadian food processors and the Canadian agricultural sector need to invest in the systems and infrastructure necessary to enable the tracking and tracing of Canadian food products from the consumer to the farm gate. The transforming of bulk commodities and intermediate product to packaged consumer product potentially reduces market risk from trade protectionist measures, particularly until tracking and tracing initiatives are enhanced.

3.3 Minimal Market Power

- Canada will increasingly be a part of a North American market, in terms of the organization and structure of industrial enterprises, including the food manufacturing enterprises with significant market power.
- United States, Japanese and European-based companies dominate this sector. It is increasingly difficult for Canadian companies to gain share and presence in the marketplace. Multinational food corporations should be encouraged to work with primary processors and the farm sector in developing consumer product desired attributes. There is perception that the Canadian food processing sector has largely been taken over by the US-based publicly and privately owned companies. For the multi-national organizations dominating the industry, decision-making is largely not made within any one national boundary. Products are designed manufactured and distributed basis a common North American market.
- Industry market power has largely been characterized by vertical integration from retail (the link to the consumer), back to the further processing of food products. Increasingly, the market power will also be further enhanced with linkages back through primary processors back to the farm gate. Product origin, traceability requirements to enhance the perception (if not reality) of food safety will present an opportunity for the Canadian industry to potentially capture further value from the consumer. The power in the food industry market lies with the integrated enterprises involved in further processing, distribution and retail. Supermarkets and vertically integrated companies from retail to further processing – heavily influence primary processors and raw material suppliers, and impact competitively on small companies competing for shelf space and access to the consumer. Canadian food processors generally do not have market power.

- There are a number of Canadian food manufacturers that exhibit market strength (Weston, McCain, Saputo, and Maple Leaf Foods were introduced earlier). These large world-scale enterprises generally have achieved their market power through focused growth through acquisition and sound business decisions within a specific market segment.
- The increasing concentration and trend towards globalization of the market demand characteristics creates opportunity for smaller manufacturers (i.e. niche positional players) to develop and manufacture lower volume, potentially higher value products. However, these enterprises must still be integrated, or have access to retailers, to get to the consumer.
- The average number of employees per Canadian food processing firm is small, relative to such sectors as aerospace and the automobile manufacturers. Further, the food processing sector is regionally dispersed in Canada; thus, the sector has relatively minimal political clout within Canada. The industry needs to increase its public profile; there continues to be significant lack of awareness of the importance of the industry within Canada.

3.4 Canada's Capabilities and Capacity

- The following points summarize general observations regarding the capabilities and capacity of Canada's food processing sector:
 - there is a lack of a comprehensive profile of capabilities; the awareness of capabilities across the food processing industry is lower than within other industries (i.e. auto manufacturing, environment, and health care);
 - it appears capabilities are fragmented within and across regions in Canada;
 - capabilities are not organized in a strategic manner;
 - funding is required to develop capabilities;
 - there is a need to identify gaps and weaknesses in desired capabilities;
 - a desired technology roadmap has been completed through the use of industry and focus groups for such industry sectors as functional foods and nutraceuticals, bio-energy, and bio-mass;
 - it is difficult to create the desire for various industries, companies and parties to work together to generate the potential synergies;
 - in addition to new capacity requirements, there is decay in existing supporting infrastructure;
 - there is concern of the return on investment by the public sector;
 - building capabilities and capacity requires funding. What is the case for diverting funds to food processing over bio-energy, health care and the environment?;
 - the current supply of raw material is significantly affected by the institutional structure in place in Canada. Supply management has to date be seen largely as an impediment to the development of the food processing sector. Processors require access to world competitively priced commodities to compete with consumer products;
 - government programming can create synergies across capabilities in different industries or regions;
 - collaboration is limited but is occurring. For example, Soy 20/20 initiatives include collaboration between government, processors, and farmers;
 - Canada requires world class facilities to compete with the non-Canadian-based MNE's; and,
 - the stakeholders at various levels of the value chain (i.e. production, basic research, applied research, processing, commercialization, marketing, clinical research) have quite different support needs from the public sector.

3.5 Product Opportunities

- Product opportunities exist as follows:
 - the processing of raw product currently being exported. There are considerable volumes of raw commodities being exported from Canada;
 - the further processing of primary processed products. There are considerable volumes of primary processed product being exported from Canada;
 - displacement of such import products as pet food, wine and condiments;
 - selected geographic markets for such high growth market product areas as: condiments, seafood products, processed tomatoes, poultry, and honey, chocolate products, and bottled water; and,
 - growth markets in such related sectors as nutraceuticals and functional foods, and bio-processing (food and industrial products).
- Canadian farmers and food manufacturers must be more aware of trends in foreign markets in order to maximize the value of their production.

3.6 Incentives for Industry Development

- Public sector policy and related programming should help encourage consumer product development by Canadian-based enterprises. Further, a public policy incentive environment is required to create enterprises with market power. There is need for enhanced programming to encourage either:
 - increased presence of Canadian-based companies with market power;
 - increased innovation and investment in such high value product areas as nutraceuticals and functional foods; and / or,
 - increased emphasis in non-food based industrial product development – bio-processing.
- An example for the food processing sector may be the approach used to develop the industrial cluster in bio-based industry in Canada. An industrial cluster refers to a concentration of companies, often in the same or related industries, that may or may not share a similar geographical location, and are often linked to a strong science and technology base. Industrial clusters are important because they create opportunities for technology transfer, facilitate the attraction of investment capital, contribute to a better understanding of markets, and help commercially exploit innovative ideas. One of the long term goals of cluster development is to build a critical mass that is capable of attracting significant foreign investment, especially the location of important multinational research, manufacturing / processing, and marketing divisions that have global mandates. Some of the important strategies for developing bio-based industry clusters have recently included:
 - establishing a world-class bio-based science and technology infrastructure in appropriate regions of Canada;
 - developing business incubators, angel investor networks, and commercialization centres that are tailored to the needs of bio-based power, fuel, and industrial biochemical industries;
 - creating “bio-refinery “pilot plants and bio-fuel/biochemical research parks; and,

- forging closer links between the bio-based science and technology base and producers, processors, downstream manufacturing industries, government and nongovernmental organizations, and the investment community.
- A strong science and technology base is not simply another factor of production but a key driver in the new 21st century bio-based economy. It is out of this base that new ideas are created for improved raw materials, cheaper and safer processing technologies, and better performing consumer products. Universities and research institutes often form the nucleus for an industrial cluster. In Ontario, for example, ag biotech firms have formed around the University of Guelph; bioinformatics companies have emerged in the Ottawa region; and, biopharmaceutical companies have located around London's Health Sciences Centre and Toronto's teaching and research hospitals. The Province of Saskatchewan has used its Agri-Food Innovation Fund to systematically upgrade its bio-based science and technology infrastructure. Their approaches may serve as models for other regions and for the food processing sector.
- Canada's lack of market power may be enhanced with a cluster's ability to help connect market needs to business opportunities. Successful companies are able to match technology push with market pull. The informal chance meetings which clusters provide for business leaders opens up opportunities to share market intelligence among related companies and to develop common marketing strategies. This matching of innovations to market needs can be assisted by creating a dialogue between researchers, product designers, and marketers.
- The largely foreign ownership of the Canadian food processing sector has provided challenge to encouraging participation in industry associations and trade groups intended in part to enable cross-industry discussion and promote collaborative opportunities. Perhaps more incentive is required through a renewed cluster approach to encourage participation of Canadian-based managers, regardless of ownership.

3.7 Impact of the Food Processing Sector on the Agriculture Industry in Canada

- The impact that the processing sector has on agricultural production is a strategic issue in that the production sector represents a massive economic engine throughout rural Canada; the demand-pull aspect of processing contributes to improved price basis for farmers with processing.
- The relative increase in processed food exports vis-à-vis primary or raw product exports emphasizes the increasing importance of the Canadian-based processing sector the agricultural sector.
- Value chain analyses indicate the raw material supplier share of food value is from 10% to 70%, depending on which product is being considered. The raw material supplier portion is then further broken down between the input suppliers to the farmer, the farmer, transporters, handlers, regulators, quality control, and marketers. Each product area requires more detailed analyses to determine the farmer portion.
- Enhanced value-added from the marketplace provides economic benefit to the farmer. For example, the farm-level share from industrial bio-processing value-added is thought to be from 10% in the bio-chemical area, to 35% of the enhanced value in bio-mass fibre manufacturing. An average of 16% increased benefit to the farmer is estimated from the development of new industrial uses from farm products⁹.

⁹ Ashmead Economic Research & Serecon Management Consulting. Non-food/Non-Feed Industrial Uses in Canada, 1997.

- ❑ A strengthened food processing sector in Canada provides additional stability for markets available to the Canadian farm sector, i.e. less reliance on export markets.
- ❑ Collaborative efforts between farmers, processors, and all other value chain participants, including governments, would enhance the opportunities for all to more fully understand the consumer product requirements and trends. Some of this collaboration may need to be closed-loop commercial confidential initiatives. Research and product development should be a shared responsibility when the prospect for enhanced value is to be shared.

3.8 Summary of Strategic Importance

The strategic importance of the food processing industry can be summarized in three areas:



Demand Pull for Agricultural Raw Product

- ❑ the consumer demand trend for increasingly stringent supply of safe, quality products will continue and dictate the need for bio-security and quality control systems from the farm gate to the consumer's table;
- ❑ the potential for enhanced economic impact from the export of agricultural raw materials and primary processed product will be limited as access to these markets will increasingly be protected;

Food Security

- ❑ the capabilities and capacity of Canada's food processing sector is not well understood; there is a potential role for the public sector to facilitate a co-ordinated, strategic approach to the further development of supporting infrastructure, and synergies within the sector to assist in guaranteeing a safe supply of food;
- ❑ there are specific product opportunities for food processing in Canada;

Economic Impact from Investment and Employment

- ❑ Canada's food processing sector has minimal market power globally; however, the sector significantly influences the economy of Canada; i.e. employment, increased stability in markets for Canadian agricultural production; increased value-added to raw materials and primary processed product;
- ❑ a public policy incentive environment is required to assist in the further development of Canadian food processing market power (either individual enterprises, or clusters); and,
- ❑ a strengthened food processing sector in Canada provides additional stability for markets available to the Canadian farm sector, and supports the further development of Canada's rural economy.

4.0 POLICY DEVELOPMENT OPPORTUNITIES

Canada's approach to the further development of the food processing sector should include focused programming for each of the three tiers of food processing enterprises in Canada, i.e.:

- enhancing the environment for the development of the Canadian-based, internationally competitive enterprise;
- supporting the foreign-controlled production and distribution subsidiaries; as well as,
- creating the environment for innovation and investment for higher value-added opportunities, which will ultimately be attained by the internationally competitive enterprise, regardless of location.

Each is an important component to the Canadian food processing industry and has distinct requirements.

Policy development opportunities exist in the following areas:

- the further development of the food processing / manufacturing sector requires a co-ordinated strategic plan, with enhanced analyses on the economic drivers impacting the industry. Directly engaging the industry players in this approach should be encouraged;
- identification and focus on the development of processing opportunity for raw product currently being exported; efforts should be focused on increasing the processing of existing raw product exports. This would enhance economic activity and reduce international market risk and market liability, i.e. tracking and tracing / origin, protectionist approaches to raw materials;
- recent government policy emphasis appears to have been in the areas of non-food bio-processing for agriculture, new product development and introduction / commercialization. Perhaps lacking is strong challenge and re-alignment to the economic drivers and apparent barriers to the further development of existing mid to large-sized food manufacturing enterprises in Canada. Some of these barriers may include:
 - access to raw materials at competitive pricing to international competitors;
 - general lack of harmonization, i.e. fortification, labeling, packaging, with our major market – the US; and,
 - the lack of a co-ordinated forum for food manufacturing development within government, within industry, and between government and industry; and,
- continued emphasis on food quality and safety will be critical to the future participation of Canada in world food markets.

APPENDIX A: SOURCES OF INFORMATION

Agriculture and Agri-food Canada, www.agr.gc.ca/

Alberta Agriculture, Food and Rural Development, www.agric.gov.ab.ca/

Consumer Food Trends, Agriculture Canada

Food and Consumer Products Manufacturers of Canada, www.fcPMC.com/

Food Net, <http://foodnet.fic.ca/>

Human Resources Development Canada, <http://roe-ab.hrdc-drhc.gc.ca/LMI/futurescapes/en/sagr.html>

Just Food.com <http://just-food.com/>

Manitoba Food Processors Association: www.mfpa.mb.ca

National Agriculture Library, US Department of Agriculture, www.nalusda.gov/ttic/misc/nutra.htm

National Institute of Nutrition, www.nin.ca/

Ontario Ministry of Agriculture, Food, and Rural Affairs, www.gov.on.ca/OMAFRA

The Canadian Dairy Commission, www.milkingredients.ca/

The Canadian Flax Council, www.flaxcouncil.ca/flaxnutT.htm

The Canadian Health Food Association, www.chfa.ca/publications/pub.html

The National Food Processors Association, www.nfpa-food.org/

Research and Analysis Directorate of AAFC – Publication Listing, http://www.agr.gc.ca/spb/rad-dra/pub_e.php

Industry Canada – Canadian Industry Statistics, Food Manufacturing,
http://strategis.ic.gc.ca/canadian_industry_statistics/cis.nsf/IDE/cis311defe.html

Statistics Canada - Industry profile (Canada's food processing industry),
<http://www.statcan.ca/english/freepub/15-515-XIE/2004001/index.htm>

AAFC Food Value Chain Bureau,
http://www.agr.gc.ca/misb/fb-ba/index_e.php?s1=proc-trans&s2=sect&page=1

Agri-Food Trade Service – Fact Sheets Canada's Agriculture, Food and Beverage Industry, <http://ats-sea.agr.ca/supply/factsheet-e.htm>

Agri-Food System Overview, Economic and Policy Analysis Directorate Policy Branch September, 1999

Analysis of Canadian Agri-Food Trade, Michael Ash, Trade Evaluation and Analysis Agriculture and Agri-Food Canada, February 2004

Analysis of Profits within the Canadian Food Processing Sector, Statistics Canada, Rick Burroughs and Deborah Harper, November 2002, June 2003

Annual Manufacturing Survey – Summary of Tables, Food Processing, 2004

Canada's Agriculture, Food and Beverage Industry, Agri-Food Trade Service, 2003

Exports/Imports – Agri-Food for 2004, AAFC, Statistics Canada, March 8, 2005

Food Processing's Top 100, Food Processing, August 2004

Overview of the Canadian Agriculture and Agri-Food System (Profile and Statistical Tables), Strategic Research Policy and Planning Team Agriculture and Agri-Food Canada, May 2004

Portrait of the Canadian Agri-Food System, Economic and Policy Analysis Directorate Policy Branch, June 2000

Potential Benefits of Functional Foods and Nutraceuticals to the Agri-Food Industry in Canada, MISB, Agriculture and Agri-Food Canada (AAFC), March 2002

Putting Globalization and Concentration in the Agri-food Sector into Context, A Journal of the Canadian Agricultural Economics Society, David Sparling, Erna van Duren, 2002

APPENDIX B: DATA TABLES

Value of Manufacturing Shipments** Principle Establishments***

| Subsectors forming the Manufacturing Sector (NAICS 31-33) | | | | | |
|---|---|---------------------|-------|-----------------|--------------------|
| NAICS Code | Subsector | Value in \$billions | | CAGR* 1993-2002 | % Change 2001-2002 |
| | | 1993 | 2002 | | |
| 311 | Food Manufacturing | 40.6 | 63.4 | 5.10% | 2.90% |
| 312 | Beverage and Tobacco Product Manufacturing | 8.5 | 11.9 | 3.80% | 2.10% |
| 313 | Textile Mills | 2.8 | 4.1 | 4.30% | -2.20% |
| 314 | Textile Product Mills | 1.8 | 2.8 | 4.60% | 4.00% |
| 315 | Clothing Manufacturing | 6 | 7.6 | 2.70% | -3.40% |
| 316 | Leather and Allied Product Manufacturing | 0.9 | 0.9 | -0.60% | -8.30% |
| 321 | Wood Product Manufacturing | 18.5 | 32.2 | 6.30% | 7.00% |
| 322 | Paper Manufacturing | 20.8 | 34 | 5.60% | -5.10% |
| 323 | Printing and Related Support Activities | 7.2 | 11.6 | 5.50% | -0.50% |
| 324 | Petroleum and Coal Products Manufacturing | 16.5 | 33.7 | 8.20% | 0.80% |
| 325 | Chemical Manufacturing | 24.8 | 40.5 | 5.60% | 5.60% |
| 326 | Plastics and Rubber Products Manufacturing | 10.8 | 24.7 | 9.60% | 7.70% |
| 327 | Non-Metallic Mineral Product Manufacturing | 6.3 | 11.3 | 6.60% | 7.50% |
| 331 | Primary Metal Manufacturing | 20.4 | 34.8 | 6.10% | 2.00% |
| 332 | Fabricated Metal Product Manufacturing | 13.3 | 31.1 | 9.90% | 3.10% |
| 333 | Machinery Manufacturing | 12.7 | 26.8 | 8.70% | 1.40% |
| 334 | Computer and Electronic Product Manufacturing | 15 | 22.3 | 4.50% | -18.40% |
| 335 | Electrical Equipment, Appliance and Component Manufacturing | 6.3 | 9.8 | 5.00% | -15.80% |
| 336 | Transportation Equipment Manufacturing | 61.8 | 125.7 | 8.20% | 2.80% |
| 337 | Furniture and Related Product Manufacturing | 5 | 13.3 | 11.40% | 1.60% |
| 339 | Miscellaneous Manufacturing | 3.8 | 7.7 | 8.20% | 13.60% |
| 31-33 | All Manufacturing | 303.9 | 550.2 | 6.80% | 1.20% |

| Industry Groups forming the Food Manufacturing Subsector (NAICS 311) | | | | | |
|--|---|---------------------|-------|-----------------|--------------------|
| NAICS Code | Industry Group | Value in \$billions | | CAGR* 1993-2002 | % Change 2001-2002 |
| | | 1993 | 2002 | | |
| 3111 | Animal Food Manufacturing | 2.9 | 5.2 | 6.90% | 7.40% |
| 3112 | Grain and Oilseed Milling | 3.6 | 5.8 | 5.20% | 8.30% |
| 3113 | Sugar and Confectionery Product Manufacturing | 2.1 | 3.4 | 5.50% | 3.40% |
| 3114 | Fruit and Vegetable Preserving and Specialty Food Manufacturing | 3.8 | 6.1 | 5.40% | 5.80% |
| 3115 | Dairy Product Manufacturing | 7.4 | 9.7 | 3.10% | -1.90% |
| 3116 | Meat Product Manufacturing | 11.8 | 18.8 | 5.30% | -0.80% |
| 3117 | Seafood Product Preparation and Packaging | 2.6 | 4.5 | 6.50% | 9.30% |
| 3118 | Bakeries and Tortilla Manufacturing | 3.3 | 4.9 | 4.50% | 2.20% |
| 3119 | Other Food Manufacturing | 3.1 | 5 | 5.30% | 8.10% |
| 311 | Food Manufacturing | 40.6 | 63.4 | 5.10% | 2.90% |
| 31-33 | All Manufacturing | 303.9 | 550.2 | 6.80% | 1.20% |

Source: Canadian Industry Statistics, Industry Canada

*Compound annual growth rate.

**Manufacturing shipments of the industry is essentially the value of goods produced by its establishments, including custom and repair work, as well as goods made under contract. They are valued in current Canadian dollars.

***Incorporated establishments with employees, primarily engaged in manufacturing and with sales of manufactured goods equal or greater than \$30,000.

Value of Manufacturing Value Added** Principle Establishments***

| Subsectors forming the Manufacturing Sector (NAICS 31-33) | | | | | |
|---|---|---------------------|-------|-----------------|--------------------|
| NAICS Code | Subsector | Value in \$billions | | CAGR* 1993-2002 | % Change 2001-2002 |
| | | 1993 | 2002 | | |
| 311 | Food Manufacturing | 13.9 | 20.3 | 4.30% | 0.50% |
| 312 | Beverage and Tobacco Product Manufacturing | 5.2 | 7.5 | 4.10% | 2.90% |
| 313 | Textile Mills | 1.3 | 1.9 | 4.40% | 1.70% |
| 314 | Textile Product Mills | 0.7 | 1.3 | 6.10% | -4.70% |
| 315 | Clothing Manufacturing | 3 | 3.9 | 2.90% | -7.40% |
| 316 | Leather and Allied Product Manufacturing | 0.5 | 0.4 | -1.20% | -4.60% |
| 321 | Wood Product Manufacturing | 7.9 | 12.7 | 5.30% | 8.60% |
| 322 | Paper Manufacturing | 7.8 | 14.4 | 7.10% | -9.80% |
| 323 | Printing and Related Support Activities | 4.1 | 6.6 | 5.30% | -1.00% |
| 324 | Petroleum and Coal Products Manufacturing | 2.2 | 4.8 | 9.40% | -7.70% |
| 325 | Chemical Manufacturing | 11.8 | 16.5 | 3.80% | 9.50% |
| 326 | Plastics and Rubber Products Manufacturing | 5.3 | 11.7 | 9.30% | 7.90% |
| 327 | Non-Metallic Mineral Product Manufacturing | 3.3 | 6 | 6.90% | 5.90% |
| 331 | Primary Metal Manufacturing | 8 | 13.7 | 6.20% | 14.50% |
| 332 | Fabricated Metal Product Manufacturing | 6.4 | 15.6 | 10.50% | 4.30% |
| 333 | Machinery Manufacturing | 6.7 | 13.6 | 8.20% | -1.10% |
| 334 | Computer and Electronic Product Manufacturing | 6.5 | 7.7 | 1.90% | -25.30% |
| 335 | Electrical Equipment, Appliance and Component Manufacturing | 3 | 4.1 | 3.60% | -16.70% |
| 336 | Transportation Equipment Manufacturing | 17.6 | 43.3 | 10.50% | 3.80% |
| 337 | Furniture and Related Product Manufacturing | 2.6 | 6.9 | 11.30% | 3.40% |
| 339 | Miscellaneous Manufacturing | 2 | 4.3 | 8.70% | 14.60% |
| 31-33 | All Manufacturing Industries | 120 | 217.3 | 6.80% | 1.30% |

| Industry Groups forming the Food Manufacturing Subsector (NAICS 311) | | | | | |
|--|---|---------------------|-------|-----------------|--------------------|
| NAICS Code | Industry Group | Value in \$billions | | CAGR* 1993-2002 | % Change 2001-2002 |
| | | 1993 | 2002 | | |
| 3111 | Animal Food Manufacturing | 0.7 | 1.3 | 6.70% | -1.60% |
| 3112 | Grain and Oilseed Milling | 1.3 | 1.8 | 4.00% | -1.00% |
| 3113 | Sugar and Confectionery Product Manufacturing | 1.1 | 1.6 | 4.70% | 2.40% |
| 3114 | Fruit and Vegetable Preserving and Specialty Food Manufacturing | 1.8 | 2.7 | 4.30% | -1.10% |
| 3115 | Dairy Product Manufacturing | 2.1 | 2.5 | 1.90% | -8.30% |
| 3116 | Meat Product Manufacturing | 2.7 | 4.2 | 5.10% | -3.40% |
| 3117 | Seafood Product Preparation and Packaging | 0.8 | 1.3 | 5.10% | 10.20% |
| 3118 | Bakeries and Tortilla Manufacturing | 1.8 | 2.7 | 4.40% | 9.50% |
| 3119 | Other Food Manufacturing | 1.6 | 2.3 | 3.90% | 6.70% |
| 311 | Food Manufacturing | 13.9 | 20.3 | 4.30% | 0.50% |
| 31-33 | All Manufacturing Industries | 120 | 217.3 | 6.80% | 1.30% |

Source: Canadian Industry Statistics, Industry Canada

*Compound annual growth rate.

**The value added is a measure of net output (i.e. of gross output less those purchased inputs - such as cost of materials and supplies and of fuel and electricity) which has been embodied in the value of the product. In contrast to the measure of total shipments, value added provides some insight into the degree of transformation, which occurs within industries.

***Incorporated establishments with employees, primarily engaged in manufacturing and with sales of manufactured goods equal or greater than \$30,000.

Manufacturing Intensity Ration (MIR) Principle Establishments*****

| Subsectors forming the Manufacturing Sector (NAICS 31-33) | | | | | |
|---|---|----------|------|-----------------|--------------------|
| NAICS Code | Subsector | MIR in % | | CAGR* 1993-2002 | % Change 2001-2002 |
| | | 1993 | 2002 | | |
| 311 | Food Manufacturing | 34.3 | 32 | -0.70% | -3.00% |
| 312 | Beverage and Tobacco Product Manufacturing | 61 | 62.6 | 0.40% | 1.60% |
| 313 | Textile Mills | 46.7 | 47.2 | 0.00% | 4.40% |
| 314 | Textile Product Mills | 40.6 | 46 | 1.30% | -8.00% |
| 315 | Clothing Manufacturing | 50.3 | 51.4 | 0.20% | -5.60% |
| 316 | Leather and Allied Product Manufacturing | 49.5 | 47 | -0.70% | 4.40% |
| 321 | Wood Product Manufacturing | 42.9 | 39.4 | -1.10% | 0.00% |
| 322 | Paper Manufacturing | 37.3 | 42.3 | 1.40% | -6.70% |
| 323 | Printing and Related Support Activities | 57.8 | 56.5 | -0.20% | 0.00% |
| 324 | Petroleum and Coal Products Manufacturing | 13.1 | 14.4 | 0.80% | -12.50% |
| 325 | Chemical Manufacturing | 47.7 | 40.6 | -1.70% | 5.10% |
| 326 | Plastics and Rubber Products Manufacturing | 48.6 | 47.5 | -0.20% | 2.10% |
| 327 | Non-Metallic Mineral Product Manufacturing | 52.2 | 53.3 | 0.20% | -1.90% |
| 331 | Primary Metal Manufacturing | 39.2 | 39.2 | 0.00% | 11.40% |
| 332 | Fabricated Metal Product Manufacturing | 48.2 | 50.3 | 0.50% | 0.00% |
| 333 | Machinery Manufacturing | 53 | 50.8 | -0.40% | -1.90% |
| 334 | Computer and Electronic Product Manufacturing | 43.5 | 34.7 | -2.50% | -7.90% |
| 335 | Electrical Equipment, Appliance and Component Manufacturing | 47.7 | 42.3 | -1.50% | -2.30% |
| 336 | Transportation Equipment Manufacturing | 28.5 | 34.4 | 1.80% | 0.00% |
| 337 | Furniture and Related Product Manufacturing | 52.5 | 52.3 | -0.20% | 2.00% |
| 339 | Miscellaneous Manufacturing | 53.5 | 55.5 | 0.40% | 1.80% |
| 31-33 | All Manufacturing Industries | 39.5 | 39.5 | 0.00% | 0.00% |

| Industry Groups forming the Food Manufacturing Subsector (NAICS 311) | | | | | |
|--|---|----------|------|-----------------|--------------------|
| NAICS Code | Industry Group | MIR in % | | CAGR* 1993-2002 | % Change 2001-2002 |
| | | 1993 | 2002 | | |
| 3111 | Animal Food Manufacturing | 24.6 | 24.2 | -0.50% | -7.70% |
| 3112 | Grain and Oilseed Milling | 34.6 | 31.2 | -1.30% | -8.80% |
| 3113 | Sugar and Confectionery Product Manufacturing | 51 | 47.7 | -0.70% | 0.00% |
| 3114 | Fruit and Vegetable Preserving and Specialty Food Manufacturing | 48.1 | 43.7 | -1.00% | -6.40% |
| 3115 | Dairy Product Manufacturing | 28.7 | 25.8 | -1.20% | -7.10% |
| 3116 | Meat Product Manufacturing | 22.7 | 22.3 | -0.50% | -4.40% |
| 3117 | Seafood Product Preparation and Packaging | 32 | 28.5 | -1.10% | 3.60% |
| 3118 | Bakeries and Tortilla Manufacturing | 55.2 | 54.7 | 0.00% | 7.80% |
| 3119 | Other Food Manufacturing | 51.5 | 45.8 | -1.40% | -2.10% |
| 311 | Food Manufacturing | 34.3 | 32 | -0.70% | -3.00% |
| 31-33 | All Manufacturing Industries | 39.5 | 39.5 | 0.00% | 0.00% |

Source: Canadian Industry Statistics, Industry Canada

*Compound annual growth rate.

**The manufacturing intensity ratio, calculated by dividing manufacturing value-added by manufacturing shipments, gives a sense of how much transformation takes place within an industry and what proportion of value is added.

***Incorporated establishments with employees, primarily engaged in manufacturing and with sales of manufactured goods equal or greater than \$30,000.

Total Wages Paid Principle Establishments**

| Subsectors forming the Manufacturing Sector (NAICS 31-33) | | | | | |
|---|---|---------------------|-------------|-----------------|--------------|
| NAICS Code | Subsector | Value in \$billions | | CAGR* 1993-2002 | % 2001-2002 |
| | | 1993 | 2002 | | |
| 311 | Food Manufacturing | 6 | 7.2 | 2.00% | 3.70% |
| 312 | Beverage and Tobacco Product Manufacturing | 1.4 | 1.3 | -0.90% | 1.50% |
| 313 | Textile Mills | 0.7 | 0.9 | 2.90% | -1% |
| 314 | Textile Product Mills | 0.4 | 0.6 | 4.20% | 1% |
| 315 | Clothing Manufacturing | 1.7 | 2.2 | 2.80% | -7.40% |
| 316 | Leather and Allied Product Manufacturing | 0.3 | 0.2 | -2.30% | -7.60% |
| 321 | Wood Product Manufacturing | 3.5 | 5.1 | 4.30% | 2% |
| 322 | Paper Manufacturing | 4.6 | 5.2 | 1.40% | 0.30% |
| 323 | Printing and Related Support Activities | 2.4 | 3.3 | 3.30% | 0.10% |
| 324 | Petroleum and Coal Products Manufacturing | 0.8 | 0.7 | -1.70% | 2.70% |
| 325 | Chemical Manufacturing | 4 | 4.6 | 1.50% | 2.70% |
| 326 | Plastics and Rubber Products Manufacturing | 2.6 | 4.9 | 7.30% | 8.20% |
| 327 | Non-Metallic Mineral Product Manufacturing | 1.6 | 2.2 | 4.20% | 6.50% |
| 331 | Primary Metal Manufacturing | 4.1 | 4.9 | 1.80% | 1.90% |
| 332 | Fabricated Metal Product Manufacturing | 3.6 | 7.8 | 9.00% | 3.40% |
| 333 | Machinery Manufacturing | 3.7 | 6.7 | 6.80% | 2.40% |
| 334 | Computer and Electronic Product Manufacturing | 3 | 4.3 | 3.90% | -8.10% |
| 335 | Electrical Equipment, Appliance and Component | 1.6 | 2.1 | 3.00% | -5.40% |
| 336 | Transportation Equipment Manufacturing | 8.1 | 11.8 | 4.20% | -0.70% |
| 337 | Furniture and Related Product | 1.5 | 3.4 | 9.80% | 7% |
| 339 | Miscellaneous Manufacturing | 1.2 | 2 | 6.40% | 5.20% |
| 31-33 | All Manufacturing | 56.8 | 81.4 | 4.10% | 1.40% |

| Industry Groups forming the Food Manufacturing Subsector (NAICS 311) | | | | | |
|--|---|---------------------|-------------|-----------------|--------------------|
| NAICS Code | Industry Group | Value in \$billions | | CAGR* 1993-2002 | % Change 2001-2002 |
| | | 1993 | 2002 | | |
| 3111 | Animal Food Manufacturing | 0.3 | 0.4 | 3.60% | -2.10% |
| 3112 | Grain and Oilseed Milling | 0.4 | 0.4 | 0.30% | 8.30% |
| 3113 | Sugar and Confectionery Product Manufacturing | 0.4 | 0.5 | 2.40% | 15.30% |
| 3114 | Fruit and Vegetable Preserving and Specialty Food Manufacturing | 0.5 | 0.8 | 4.40% | 3.40% |
| 3115 | Dairy Product Manufacturing | 0.9 | 0.8 | -1.10% | 4.30% |
| 3116 | Meat Product Manufacturing | 1.4 | 1.9 | 3.70% | -3.50% |
| 3117 | Seafood Product Preparation and Packaging | 0.5 | 0.6 | 3.30% | 5.50% |
| 3118 | Bakeries and Tortilla Manufacturing | 1.1 | 1.1 | 0.60% | 11.20% |
| 3119 | Other Food Manufacturing | 0.6 | 0.7 | 0.90% | 4.40% |
| 311 | Food Manufacturing | 6 | 7.2 | 2.00% | 3.70% |
| 31-33 | All Manufacturing | 56.8 | 81.4 | 4.10% | 1.40% |

Source: Canadian Industry Statistics, Industry Canada

*Compound annual growth rate.

**Incorporated establishments with employees, primarily engaged in manufacturing and with sales of manufactured goods equal or greater than \$30,000.

Employment by Type Principle Establishments 1993-2002**

| All Manufacturing (NAICS 31-33) | | | | | |
|------------------------------------|------------------------|------------------|-----------------------|--------------------|--------------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 1,204,605 | 1,528,720 | 78.00% | 2.70% | -3.70% |
| Administrative | 388,471 | 430,130 | 22.00% | 1.10% | 15.90% |
| Total | 1,593,076 | 1,958,850 | 100% | 2.30% | 0.00% |

| Food Manufacturing (NAICS 311) | | | | | |
|-----------------------------------|------------------------|----------------|-----------------------|--------------------|--------------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 143,451 | 201,028 | 82.50% | 3.80% | 2.00% |
| Administrative | 50,470 | 42,769 | 17.50% | -1.80% | 17.00% |
| Total | 193,921 | 243,797 | 100% | 2.60% | 4.30% |

Source: Canadian Industry Statistics, Industry Canada

*Compound annual growth rate.

**Incorporated establishments with employees, primarily engaged in manufacturing and with sales of manufactured goods equal or greater than \$30,000.

Employment by Type Principle Establishments** 1993-2002 (continued)

| Animal Food Manufacturing (NAICS 3111) | | | | | |
|---|---------------------|---------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Prod'n | 5,852 | 7,321 | 66.00% | 2.50% | -18.80% |
| Admin | 3,039 | 3,779 | 34.00% | 2.50% | 39.10% |
| Total | 8,891 | 11,100 | 100% | 2.50% | -5.40% |

| Grain and Oilseed Milling (NAICS 3112) | | | | | |
|---|---------------------|--------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 5,505 | 7,245 | 82.40% | 3.10% | 10.80% |
| Administrat | 3,143 | 1,546 | 17.60% | -7.60% | 12.10% |
| Total | 8,648 | 8,791 | 100% | 0.20% | 11.00% |

| Sugar and Confectionery Product Manufacturing (NAICS 3113) | | | | | |
|---|---------------------|---------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 7,894 | 10,637 | 80.50% | 3.40% | 9.60% |
| Administrat | 3,452 | 2,582 | 19.50% | -3.20% | 24.40% |
| Total | 11,346 | 13,219 | 100% | 1.70% | 12.20% |

| Fruit and Vegetable Preserving and Specialty Food (NAICS 3114) | | | | | |
|---|---------------------|---------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 13,938 | 20,995 | 83.50% | 4.70% | 2.00% |
| Administrat | 4,667 | 4,136 | 16.50% | -1.30% | 10.70% |
| Total | 18,605 | 25,131 | 100% | 3.40% | 3.30% |

| Dairy Product Manufacturing (NAICS 3115) | | | | | |
|---|---------------------|---------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 13,959 | 14,695 | 75.20% | 0.60% | -0.10% |
| Administrat | 9,709 | 4,839 | 24.80% | -7.50% | 1.30% |
| Total | 23,668 | 19,534 | 100% | -2.10% | 0.20% |

| Meat Product Manufacturing (NAICS 3116) | | | | | |
|--|---------------------|---------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 39,926 | 56,118 | 86.00% | 3.90% | -4.20% |
| Administrat | 7,084 | 9,125 | 14.00% | 2.90% | -1.20% |
| Total | 47,010 | 65,243 | 100% | 3.70% | -3.80% |

| Seafood Product Preparation and Packaging (NAICS 3117) | | | | | |
|---|---------------------|---------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 18,912 | 35,134 | 90.70% | 7.10% | 10.70% |
| Administrat | 2,825 | 3,607 | 9.30% | 2.80% | 16.50% |
| Total | 21,737 | 38,741 | 100% | 6.60% | 11.20% |

| Bakeries and Tortilla Manufacturing (NAICS 3118) | | | | | |
|---|---------------------|---------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 26,360 | 33,368 | 81.60% | 2.70% | 7.40% |
| Administrat | 9,285 | 7,547 | 18.40% | -2.30% | 52.30% |
| Total | 35,645 | 40,915 | 100% | 1.50% | 13.50% |

| Other Food Manufacturing (NAICS 3119) | | | | | |
|--|---------------------|---------------|-----------------|-----------------|--------------------|
| Type of Employee | Number of Employees | | % of Total 2002 | CAGR* 1993-2002 | % Change 2001-2002 |
| | 1993 | 2002 | | | |
| Production | 11,105 | 15,515 | 73.50% | 3.80% | 2.60% |
| Administrat | 7,266 | 5,608 | 26.50% | -2.80% | 22.80% |
| Total | 18,371 | 21,123 | 100% | 1.60% | 7.30% |

Establishments and Employment Principle Establishments**

| ALL Manufacturing | | | | |
|-------------------|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 31,630 | 1,204,605 | 388,471 | 1,593,076 |
| 1994 | 30,665 | 1,230,553 | 390,423 | 1,620,976 |
| 1995 | 31,445 | 1,276,941 | 390,561 | 1,667,502 |
| 1996 | 34,747 | 1,339,663 | 389,255 | 1,728,918 |
| 1997 | 33,079 | 1,393,494 | 390,851 | 1,784,345 |
| 1998 | 32,153 | 1,461,255 | 395,026 | 1,856,281 |
| 1999 | 29,822 | 1,494,809 | 415,243 | 1,910,052 |
| 2000 | 53,399 | 1,574,641 | 378,164 | 1,952,805 |
| 2001 | 54,031 | 1,587,141 | 371,268 | 1,958,409 |
| 2002 | 54,346 | 1,528,720 | 430,130 | 1,958,850 |

Source: Statistics Canada, Annual Survey of Manufactures

| Food Manufacturing | | | | |
|--------------------|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 2,998 | 143,451 | 50,470 | 193,921 |
| 1994 | 2,944 | 144,770 | 49,693 | 194,463 |
| 1995 | 2,953 | 146,193 | 46,703 | 192,896 |
| 1996 | 3,133 | 153,370 | 45,509 | 198,879 |
| 1997 | 3,041 | 157,286 | 42,911 | 200,197 |
| 1998 | 3,664 | 154,509 | 45,682 | 200,191 |
| 1999 | 3,467 | 167,818 | 49,746 | 217,564 |
| 2000 | 5,533 | 194,783 | 36,318 | 231,101 |
| 2001 | 5,545 | 197,106 | 36,544 | 233,650 |
| 2002 | 5,444 | 201,028 | 42,769 | 243,797 |

Source: Statistics Canada, Annual Survey of Manufactures

Source: Canadian Industry Statistics, Industry Canada

**Incorporated establishments with employees, primarily engaged in manufacturing and with sales of manufactured goods equal or greater than \$30,000.

Establishments and Employment Principle Establishments** (continued)

| Animal Food Manufacturing | | | | |
|---------------------------|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 481 | 5,852 | 3,039 | 8,891 |
| 1994 | 478 | 6,069 | 3,186 | 9,255 |
| 1995 | 460 | 5,985 | 3,062 | 9,047 |
| 1996 | 480 | 6,400 | 3,200 | 9,600 |
| 1997 | 467 | 6,342 | 3,506 | 9,848 |
| 1998 | 433 | 5,849 | 3,881 | 9,730 |
| 1999 | 406 | 5,841 | 5,819 | 11,660 |
| 2000 | 554 | 10,693 | 2,755 | 13,448 |
| 2001 | 562 | 9,014 | 2,716 | 11,730 |
| 2002 | 547 | 7,321 | 3,779 | 11,100 |

| Grain and Oilseed Milling | | | | |
|---------------------------|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 93 | 5,505 | 3,143 | 8,648 |
| 1994 | 92 | 5,581 | 2,860 | 8,441 |
| 1995 | 100 | 5,701 | 3,054 | 8,755 |
| 1996 | 105 | 5,511 | 2,839 | 8,350 |
| 1997 | 109 | 5,600 | 2,593 | 8,193 |
| 1998 | 107 | 5,295 | 2,546 | 7,841 |
| 1999 | 108 | 5,808 | 2,591 | 8,399 |
| 2000 | 168 | 6,406 | 1,317 | 7,723 |
| 2001 | 177 | 6,542 | 1,379 | 7,921 |
| 2002 | 169 | 7,245 | 1,546 | 8,791 |

| Sugar and Confectionery Product Manufacturing | | | | |
|---|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 96 | 7,894 | 3,452 | 11,346 |
| 1994 | 96 | 7,622 | 3,352 | 10,974 |
| 1995 | 114 | 7,824 | 3,172 | 10,996 |
| 1996 | 118 | 8,062 | 3,183 | 11,245 |
| 1997 | 116 | 8,450 | 3,271 | 11,721 |
| 1998 | 101 | 8,470 | 3,211 | 11,681 |
| 1999 | 118 | 9,934 | 3,512 | 13,446 |
| 2000 | 183 | 9,265 | 1,879 | 11,144 |
| 2001 | 189 | 9,710 | 2,076 | 11,786 |
| 2002 | 194 | 10,637 | 2,582 | 13,219 |

| Fruit and Vegetable Preserving and Specialty Food Manufacturing | | | | |
|---|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 202 | 13,938 | 4,667 | 18,605 |
| 1994 | 195 | 14,485 | 4,624 | 19,109 |
| 1995 | 204 | 15,184 | 3,924 | 19,108 |
| 1996 | 225 | 15,980 | 4,443 | 20,423 |
| 1997 | 218 | 16,316 | 4,033 | 20,349 |
| 1998 | 216 | 15,560 | 4,228 | 19,788 |
| 1999 | 211 | 18,128 | 3,810 | 21,938 |
| 2000 | 377 | 20,468 | 3,610 | 24,078 |
| 2001 | 372 | 20,586 | 3,737 | 24,323 |
| 2002 | 377 | 20,995 | 4,136 | 25,131 |

| Dairy Product Manufacturing | | | | |
|-----------------------------|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 295 | 13,959 | 9,709 | 23,668 |
| 1994 | 282 | 14,304 | 8,988 | 23,292 |
| 1995 | 275 | 14,015 | 8,045 | 22,060 |
| 1996 | 280 | 13,375 | 7,544 | 20,919 |
| 1997 | 267 | 13,634 | 7,310 | 20,944 |
| 1998 | 261 | 13,216 | 7,587 | 20,803 |
| 1999 | 243 | 13,923 | 7,069 | 20,992 |
| 2000 | 440 | 15,159 | 4,846 | 20,005 |
| 2001 | 434 | 14,714 | 4,777 | 19,491 |
| 2002 | 436 | 14,695 | 4,839 | 19,534 |

| Meat Product Manufacturing | | | | |
|----------------------------|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 580 | 39,926 | 7,084 | 47,010 |
| 1994 | 558 | 39,585 | 7,250 | 46,835 |
| 1995 | 564 | 40,451 | 8,046 | 48,497 |
| 1996 | 588 | 43,991 | 8,539 | 52,530 |
| 1997 | 580 | 46,986 | 8,088 | 55,074 |
| 1998 | 522 | 45,661 | 8,162 | 53,823 |
| 1999 | 498 | 50,141 | 8,155 | 58,296 |
| 2000 | 777 | 57,567 | 7,743 | 65,310 |
| 2001 | 769 | 58,590 | 9,238 | 67,828 |
| 2002 | 789 | 56,118 | 9,125 | 65,243 |

| Seafood Product Preparation and Packaging | | | | |
|---|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 408 | 18,912 | 2,825 | 21,737 |
| 1994 | 404 | 18,592 | 3,139 | 21,731 |
| 1995 | 395 | 18,444 | 3,096 | 21,540 |
| 1996 | 438 | 18,890 | 2,595 | 21,485 |
| 1997 | 429 | 19,178 | 2,456 | 21,634 |
| 1998 | 429 | 20,002 | 2,701 | 22,703 |
| 1999 | 391 | 21,351 | 2,992 | 24,343 |
| 2000 | 708 | 29,029 | 3,029 | 32,058 |
| 2001 | 700 | 31,743 | 3,096 | 34,839 |
| 2002 | 687 | 35,134 | 3,607 | 38,741 |

| Bakeries and Tortilla Manufacturing | | | | |
|-------------------------------------|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 561 | 26,360 | 9,285 | 35,645 |
| 1994 | 543 | 26,976 | 9,148 | 36,124 |
| 1995 | 543 | 27,381 | 7,310 | 34,691 |
| 1996 | 594 | 28,647 | 6,343 | 34,990 |
| 1997 | 572 | 28,100 | 6,277 | 34,377 |
| 1998 | 1,355 | 28,699 | 6,522 | 35,221 |
| 1999 | 1,261 | 30,796 | 9,115 | 39,911 |
| 2000 | 1,779 | 29,340 | 5,033 | 34,373 |
| 2001 | 1,779 | 31,082 | 4,957 | 36,039 |
| 2002 | 1,694 | 33,368 | 7,547 | 40,915 |

| Other Food Manufacturing | | | | |
|--------------------------|-----------------------|----------------------|--------------------------|---------------|
| Year | Active Establishments | Production Employees | Administrative Employees | All Employees |
| 1993 | 282 | 11,105 | 7,266 | 18,371 |
| 1994 | 296 | 11,556 | 7,146 | 18,702 |
| 1995 | 298 | 11,208 | 6,994 | 18,202 |
| 1996 | 324 | 12,514 | 6,823 | 19,337 |
| 1997 | 274 | 12,680 | 5,377 | 18,057 |
| 1998 | 240 | 11,757 | 6,844 | 18,601 |
| 1999 | 231 | 11,896 | 6,683 | 18,579 |
| 2000 | 547 | 16,856 | 6,106 | 22,962 |
| 2001 | 563 | 15,125 | 4,568 | 19,693 |
| 2002 | 551 | 15,515 | 5,608 | 21,123 |

Number of Establishments in Canada by Type and Region

| ALL Manufacturing (NAICS 31-33) | | | | |
|--|---------------|---------------------------------|----------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 5,660 | 3,818 | 9,478 | 9.00% |
| British Columbia | 8,318 | 5,736 | 14,054 | 13.30% |
| Manitoba | 1,817 | 1,038 | 2,855 | 2.70% |
| New Brunswick | 1,304 | 758 | 2,062 | 2.00% |
| Newfoundland | 688 | 362 | 1,050 | 1.00% |
| NWT | 23 | 13 | 36 | 0.00% |
| Nova Scotia | 1,644 | 815 | 2,459 | 2.30% |
| Nunavut | 10 | 7 | 17 | 0.00% |
| Ontario | 24,233 | 16,629 | 40,862 | 38.70% |
| PEI | 306 | 124 | 430 | 0.40% |
| Quebec | 17,716 | 12,186 | 29,902 | 28.30% |
| Saskatchewan | 1,311 | 919 | 2,230 | 2.10% |
| Yukon Territory | 35 | 36 | 71 | 0.10% |
| CANADA | 63,065 | 42,441 | 105,506 | 100% |
| % Distribution * | 59.80% | 40.20% | 100% | |

| Food Manufacturing (NAICS 311) | | | | |
|---|--------------|---------------------------------|---------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 571 | 392 | 963 | 9.20% |
| British Columbia | 861 | 428 | 1,289 | 12.30% |
| Manitoba | 266 | 141 | 407 | 3.90% |
| New Brunswick | 281 | 105 | 386 | 3.70% |
| Newfoundland | 210 | 92 | 302 | 2.90% |
| NWT | 1 | 0 | 1 | 0.00% |
| Nova Scotia | 525 | 149 | 674 | 6.40% |
| Nunavut | 5 | 1 | 6 | 0.10% |
| Ontario | 2,061 | 1,221 | 3,282 | 31.20% |
| PEI | 96 | 29 | 125 | 1.20% |
| Quebec | 1,771 | 813 | 2,584 | 24.60% |
| Saskatchewan | 238 | 245 | 483 | 4.60% |
| Yukon Territory | 5 | 1 | 6 | 0.10% |
| CANADA | 6,891 | 3,617 | 10,508 | 100% |
| % Distribution * | 65.60% | 34.40% | 100% | |

Source: Statistics Canada, Business Patterns Database, December 2003

*May not add up perfectly due to rounding

Number of Establishments in Canada by Type and Region (continued)

| Animal Food Manufacturing (NAICS 3111) | | | | |
|---|------------|---------------------------------|------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 78 | 41 | 119 | 14.40% |
| British Columbia | 40 | 37 | 77 | 9.30% |
| Manitoba | 38 | 7 | 45 | 5.50% |
| New Brunswick | 20 | 5 | 25 | 3.00% |
| Newfoundland | 2 | 0 | 2 | 0.20% |
| NWT | 0 | 0 | 0 | 0.00% |
| Nova Scotia | 24 | 3 | 27 | 3.30% |
| Nunavut | 0 | 0 | 0 | 0.00% |
| Ontario | 182 | 71 | 253 | 30.70% |
| PEI | 5 | 3 | 8 | 1.00% |
| Quebec | 174 | 45 | 219 | 26.60% |
| Saskatchewan | 36 | 13 | 49 | 5.90% |
| Yukon Territory | 0 | 0 | 0 | 0.00% |
| CANADA | 599 | 225 | 824 | 100% |
| % Distribution * | 72.70% | 27.30% | 100% | |

| Grain and Oilseed Milling (NAICS 3112) | | | | |
|---|------------|---------------------------------|------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 24 | 0 | 24 | 8.20% |
| British Columbia | 19 | 10 | 29 | 9.90% |
| Manitoba | 17 | 5 | 22 | 7.50% |
| New Brunswick | 2 | 2 | 4 | 1.40% |
| Newfoundland | 2 | 0 | 2 | 0.70% |
| NWT | 0 | 0 | 0 | 0.00% |
| Nova Scotia | 3 | 2 | 5 | 1.70% |
| Nunavut | 0 | 0 | 0 | 0.00% |
| Ontario | 70 | 20 | 90 | 30.70% |
| PEI | 0 | 0 | 0 | 0.00% |
| Quebec | 59 | 33 | 92 | 31.40% |
| Saskatchewan | 20 | 5 | 25 | 8.50% |
| Yukon Territory | 0 | 0 | 0 | 0.00% |
| CANADA | 216 | 77 | 293 | 100% |
| % Distribution * | 73.70% | 26.30% | 100% | |

| Sugar and Confectionery Product Manufacturing (NAICS 3113) | | | | |
|---|------------|---------------------------------|------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 16 | 12 | 28 | 6.50% |
| British Columbia | 46 | 19 | 65 | 15.10% |
| Manitoba | 8 | 2 | 10 | 2.30% |
| New Brunswick | 3 | 8 | 11 | 2.60% |
| Newfoundland | 3 | 0 | 3 | 0.70% |
| NWT | 0 | 0 | 0 | 0.00% |
| Nova Scotia | 7 | 3 | 10 | 2.30% |
| Nunavut | 1 | 0 | 1 | 0.20% |
| Ontario | 100 | 56 | 156 | 36.30% |
| PEI | 1 | 2 | 3 | 0.70% |
| Quebec | 90 | 47 | 137 | 31.90% |
| Saskatchewan | 2 | 4 | 6 | 1.40% |
| Yukon Territory | 0 | 0 | 0 | 0.00% |
| CANADA | 277 | 153 | 430 | 100% |
| % Distribution * | 64.40% | 35.60% | 100% | |

| Fruit and Vegetable Preserving and Specialty Food Manufacturing (NAICS 3114) | | | | |
|---|------------|---------------------------------|------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 34 | 14 | 48 | 7.10% |
| British Columbia | 68 | 26 | 94 | 14.00% |
| Manitoba | 12 | 6 | 18 | 2.70% |
| New Brunswick | 13 | 7 | 20 | 3.00% |
| Newfoundland | 2 | 3 | 5 | 0.70% |
| NWT | 0 | 0 | 0 | 0.00% |
| Nova Scotia | 17 | 4 | 21 | 3.10% |
| Nunavut | 0 | 0 | 0 | 0.00% |
| Ontario | 181 | 85 | 266 | 39.60% |
| PEI | 5 | 3 | 8 | 1.20% |
| Quebec | 127 | 56 | 183 | 27.20% |
| Saskatchewan | 5 | 3 | 8 | 1.20% |
| Yukon Territory | 0 | 1 | 1 | 0.10% |
| CANADA | 464 | 208 | 672 | 100% |
| % Distribution * | 69.00% | 31.00% | 100% | |

| Dairy Product Manufacturing (NAICS 3115) | | | | |
|---|------------|---------------------------------|--------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 63 | 177 | 240 | 18.30% |
| British Columbia | 66 | 55 | 121 | 9.20% |
| Manitoba | 35 | 53 | 88 | 6.70% |
| New Brunswick | 16 | 4 | 20 | 1.50% |
| Newfoundland | 12 | 2 | 14 | 1.10% |
| NWT | 0 | 0 | 0 | 0.00% |
| Nova Scotia | 25 | 12 | 37 | 2.80% |
| Nunavut | 0 | 0 | 0 | 0.00% |
| Ontario | 175 | 190 | 365 | 27.80% |
| PEI | 15 | 1 | 16 | 1.20% |
| Quebec | 148 | 55 | 203 | 15.50% |
| Saskatchewan | 48 | 159 | 207 | 15.80% |
| Yukon Territory | 0 | 0 | 0 | 0.00% |
| CANADA | 603 | 708 | 1,311 | 100% |
| % Distribution * | 46.00% | 54.00% | 100% | |

| Meat Product Manufacturing (NAICS 3116) | | | | |
|--|------------|---------------------------------|--------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 134 | 45 | 179 | 13.50% |
| British Columbia | 94 | 21 | 115 | 8.70% |
| Manitoba | 58 | 23 | 81 | 6.10% |
| New Brunswick | 11 | 4 | 15 | 1.10% |
| Newfoundland | 18 | 4 | 22 | 1.70% |
| NWT | 0 | 0 | 0 | 0.00% |
| Nova Scotia | 20 | 8 | 28 | 2.10% |
| Nunavut | 1 | 1 | 2 | 0.20% |
| Ontario | 320 | 121 | 441 | 33.20% |
| PEI | 3 | 2 | 5 | 0.40% |
| Quebec | 253 | 99 | 352 | 26.50% |
| Saskatchewan | 59 | 28 | 87 | 6.60% |
| Yukon Territory | 0 | 0 | 0 | 0.00% |
| CANADA | 971 | 356 | 1,327 | 100% |
| % Distribution * | 73.20% | 26.80% | 100% | |

| Seafood Product Preparation and Packaging (NAICS 3117) | | | | |
|---|--------------|---------------------------------|--------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 3 | 3 | 6 | 0.40% |
| British Columbia | 122 | 90 | 212 | 15.50% |
| Manitoba | 10 | 4 | 14 | 1.00% |
| New Brunswick | 148 | 36 | 184 | 13.40% |
| Newfoundland | 147 | 72 | 219 | 16.00% |
| NWT | 0 | 0 | 0 | 0.00% |
| Nova Scotia | 363 | 87 | 450 | 32.90% |
| Nunavut | 3 | 0 | 3 | 0.20% |
| Ontario | 47 | 27 | 74 | 5.40% |
| PEI | 52 | 16 | 68 | 5.00% |
| Quebec | 101 | 30 | 131 | 9.60% |
| Saskatchewan | 5 | 3 | 8 | 0.60% |
| Yukon Territory | 0 | 0 | 0 | 0.00% |
| CANADA | 1,001 | 368 | 1,369 | 100% |
| % Distribution * | 73.10% | 26.90% | 100% | |

| Bakeries and Tortilla Manufacturing (NAICS 3118) | | | | |
|---|--------------|---------------------------------|--------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 159 | 71 | 230 | 7.10% |
| British Columbia | 294 | 116 | 410 | 12.60% |
| Manitoba | 64 | 25 | 89 | 2.70% |
| New Brunswick | 54 | 32 | 86 | 2.60% |
| Newfoundland | 19 | 7 | 26 | 0.80% |
| NWT | 1 | 0 | 1 | 0.00% |
| Nova Scotia | 54 | 25 | 79 | 2.40% |
| Nunavut | 0 | 0 | 0 | 0.00% |
| Ontario | 753 | 505 | 1,258 | 38.60% |
| PEI | 10 | 1 | 11 | 0.30% |
| Quebec | 629 | 368 | 997 | 30.60% |
| Saskatchewan | 50 | 21 | 71 | 2.20% |
| Yukon Territory | 4 | 0 | 4 | 0.10% |
| CANADA | 2,091 | 1,171 | 3,262 | 100% |
| % Distribution * | 64.10% | 35.90% | 100% | |

| Other Food Manufacturing (NAICS 3119) | | | | |
|--|------------|---------------------------------|--------------|------------------|
| Province or Territory | Employers | Non-Employers/ Indeterminate | Total | % of Canada * |
| Alberta | 60 | 29 | 89 | 8.70% |
| British Columbia | 112 | 54 | 166 | 16.30% |
| Manitoba | 24 | 16 | 40 | 3.90% |
| New Brunswick | 14 | 7 | 21 | 2.10% |
| Newfoundland | 5 | 4 | 9 | 0.90% |
| NWT | 0 | 0 | 0 | 0.00% |
| Nova Scotia | 12 | 5 | 17 | 1.70% |
| Nunavut | 0 | 0 | 0 | 0.00% |
| Ontario | 233 | 146 | 379 | 37.20% |
| PEI | 5 | 1 | 6 | 0.60% |
| Quebec | 190 | 80 | 270 | 26.50% |
| Saskatchewan | 13 | 9 | 22 | 2.20% |
| Yukon Territory | 1 | 0 | 1 | 0.10% |
| CANADA | 669 | 351 | 1,020 | 100% |
| % Distribution * | 65.60% | 34.40% | 100% | |

Number of Employer Establishments by Employment Size Category and Region

| All Manufacturing (NAICS 31-33) | | | | |
|--|---|---------------|-------------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ |
| Alberta | 2,471 | 2,851 | 320 | 18 |
| British Columbia | 4,122 | 3,743 | 419 | 34 |
| Manitoba | 676 | 980 | 146 | 15 |
| New Brunswick | 563 | 618 | 111 | 12 |
| Newfoundland | 323 | 296 | 59 | 10 |
| NWT | 6 | 17 | 0 | 0 |
| Nova Scotia | 763 | 784 | 84 | 13 |
| Nunavut | 3 | 7 | 0 | 0 |
| Ontario | 9,219 | 12,715 | 2,086 | 213 |
| PEI | 140 | 151 | 14 | 1 |
| Quebec | 8,376 | 8,027 | 1,194 | 119 |
| Saskatchewan | 609 | 631 | 66 | 5 |
| Yukon Territory | 20 | 15 | 0 | 0 |
| CANADA | 27,291 | 30,835 | 4,499 | 440 |
| % Distribution * | 43.30% | 48.90% | 7.10% | 0.70% |

| Food Manufacturing (NAICS 311) | | | | |
|---|---|---------------|-------------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ |
| Alberta | 244 | 282 | 42 | 3 |
| British Columbia | 401 | 395 | 60 | 5 |
| Manitoba | 105 | 142 | 16 | 3 |
| New Brunswick | 114 | 117 | 46 | 4 |
| Newfoundland | 64 | 89 | 49 | 8 |
| NWT | 0 | 1 | 0 | 0 |
| Nova Scotia | 220 | 270 | 32 | 3 |
| Nunavut | 1 | 4 | 0 | 0 |
| Ontario | 789 | 1,061 | 186 | 25 |
| PEI | 40 | 44 | 11 | 1 |
| Quebec | 821 | 793 | 145 | 12 |
| Saskatchewan | 119 | 106 | 11 | 2 |
| Yukon Territory | 3 | 2 | 0 | 0 |
| CANADA | 2,921 | 3,306 | 598 | 66 |
| % Distribution * | 42.40% | 48.00% | 8.70% | 1.00% |

Source: Statistics Canada, Business Patterns Database, December 2003

*May not add up perfectly due to rounding

Number of Employer Establishments by Employment Size Category and Region (continued)

| Animal Food Manufacturing (NAICS 3111) | | | | | |
|---|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 19 | 58 | 1 | 0 | |
| British Columbia | 19 | 17 | 4 | 0 | |
| Manitoba | 7 | 31 | 0 | 0 | |
| New Brunswick | 9 | 10 | 1 | 0 | |
| Newfoundland | 1 | 1 | 0 | 0 | |
| NWT | 0 | 0 | 0 | 0 | |
| Nova Scotia | 10 | 14 | 0 | 0 | |
| Nunavut | 0 | 0 | 0 | 0 | |
| Ontario | 47 | 129 | 6 | 0 | |
| PEI | 2 | 3 | 0 | 0 | |
| Quebec | 50 | 122 | 2 | 0 | |
| Saskatchewan | 11 | 24 | 1 | 0 | |
| Yukon Territory | 0 | 0 | 0 | 0 | |
| CANADA | 175 | 409 | 15 | 0 | |
| % Distribution * | 29.20% | 68.30% | 2.50% | 0.00% | |

| Fruit and Vegetable Preserving and Specialty Food (NAICS 3114) | | | | | |
|---|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 14 | 15 | 5 | 0 | |
| British Columbia | 33 | 28 | 6 | 1 | |
| Manitoba | 2 | 5 | 3 | 2 | |
| New Brunswick | 4 | 5 | 2 | 2 | |
| Newfoundland | 0 | 2 | 0 | 0 | |
| NWT | 0 | 0 | 0 | 0 | |
| Nova Scotia | 3 | 11 | 3 | 0 | |
| Nunavut | 0 | 0 | 0 | 0 | |
| Ontario | 66 | 88 | 24 | 3 | |
| PEI | 1 | 2 | 1 | 1 | |
| Quebec | 47 | 68 | 12 | 0 | |
| Saskatchewan | 2 | 3 | 0 | 0 | |
| Yukon Territory | 0 | 0 | 0 | 0 | |
| CANADA | 172 | 227 | 56 | 9 | |
| % Distribution * | 37.10% | 48.90% | 12.10% | 1.90% | |

| Seafood Product Preparation and Packaging (NAICS 3117) | | | | | |
|---|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 1 | 2 | 0 | 0 | |
| British Columbia | 37 | 64 | 20 | 1 | |
| Manitoba | 6 | 3 | 1 | 0 | |
| New Brunswick | 52 | 59 | 36 | 1 | |
| Newfoundland | 33 | 59 | 47 | 8 | |
| NWT | 0 | 0 | 0 | 0 | |
| Nova Scotia | 151 | 190 | 20 | 2 | |
| Nunavut | 1 | 2 | 0 | 0 | |
| Ontario | 17 | 29 | 1 | 0 | |
| PEI | 25 | 19 | 8 | 0 | |
| Quebec | 44 | 39 | 18 | 0 | |
| Saskatchewan | 4 | 1 | 0 | 0 | |
| Yukon Territory | 0 | 0 | 0 | 0 | |
| CANADA | 371 | 467 | 151 | 12 | |
| % Distribution * | 37.10% | 46.70% | 15.10% | 1.20% | |

| Grain and Oilseed Milling (NAICS 3112) | | | | | |
|---|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 6 | 17 | 1 | 0 | |
| British Columbia | 9 | 10 | 0 | 0 | |
| Manitoba | 4 | 12 | 1 | 0 | |
| New Brunswick | 0 | 2 | 0 | 0 | |
| Newfoundland | 0 | 2 | 0 | 0 | |
| NWT | 0 | 0 | 0 | 0 | |
| Nova Scotia | 1 | 2 | 0 | 0 | |
| Nunavut | 0 | 0 | 0 | 0 | |
| Ontario | 18 | 35 | 15 | 2 | |
| PEI | 0 | 0 | 0 | 0 | |
| Quebec | 35 | 21 | 3 | 0 | |
| Saskatchewan | 3 | 15 | 2 | 0 | |
| Yukon Territory | 0 | 0 | 0 | 0 | |
| CANADA | 76 | 116 | 22 | 2 | |
| % Distribution * | 35.20% | 53.70% | 10.20% | 0.90% | |

| Dairy Product Manufacturing (NAICS 3115) | | | | | |
|---|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 34 | 25 | 4 | 0 | |
| British Columbia | 39 | 23 | 3 | 1 | |
| Manitoba | 15 | 19 | 1 | 0 | |
| New Brunswick | 9 | 6 | 1 | 0 | |
| Newfoundland | 5 | 7 | 0 | 0 | |
| NWT | 0 | 0 | 0 | 0 | |
| Nova Scotia | 11 | 13 | 1 | 0 | |
| Nunavut | 0 | 0 | 0 | 0 | |
| Ontario | 57 | 101 | 17 | 0 | |
| PEI | 7 | 7 | 1 | 0 | |
| Quebec | 46 | 79 | 22 | 1 | |
| Saskatchewan | 32 | 15 | 1 | 0 | |
| Yukon Territory | 0 | 0 | 0 | 0 | |
| CANADA | 255 | 295 | 51 | 2 | |
| % Distribution * | 42.30% | 48.90% | 8.50% | 0.30% | |

| Bakeries and Tortilla Manufacturing (NAICS 3118) | | | | | |
|---|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 75 | 77 | 7 | 0 | |
| British Columbia | 148 | 143 | 3 | 0 | |
| Manitoba | 32 | 28 | 4 | 0 | |
| New Brunswick | 30 | 22 | 2 | 0 | |
| Newfoundland | 7 | 11 | 1 | 0 | |
| NWT | 0 | 1 | 0 | 0 | |
| Nova Scotia | 27 | 25 | 2 | 0 | |
| Nunavut | 0 | 0 | 0 | 0 | |
| Ontario | 340 | 359 | 50 | 4 | |
| PEI | 3 | 7 | 0 | 0 | |
| Quebec | 362 | 230 | 34 | 3 | |
| Saskatchewan | 24 | 24 | 2 | 0 | |
| Yukon Territory | 2 | 2 | 0 | 0 | |
| CANADA | 1,050 | 929 | 105 | 7 | |
| % Distribution * | 50.20% | 44.40% | 5.00% | 0.30% | |

| Sugar and Confectionery Product Manufacturing (NAICS 3113) | | | | | |
|---|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 11 | 4 | 1 | 0 | |
| British Columbia | 21 | 20 | 5 | 0 | |
| Manitoba | 3 | 5 | 0 | 0 | |
| New Brunswick | 0 | 1 | 2 | 0 | |
| Newfoundland | 3 | 0 | 0 | 0 | |
| NWT | 0 | 0 | 0 | 0 | |
| Nova Scotia | 3 | 3 | 0 | 1 | |
| Nunavut | 0 | 1 | 0 | 0 | |
| Ontario | 46 | 36 | 13 | 5 | |
| PEI | 0 | 1 | 0 | 0 | |
| Quebec | 53 | 31 | 4 | 2 | |
| Saskatchewan | 1 | 1 | 0 | 0 | |
| Yukon Territory | 0 | 0 | 0 | 0 | |
| CANADA | 141 | 103 | 25 | 8 | |
| % Distribution * | 50.90% | 37.20% | 9.00% | 2.90% | |

| Meat Product Manufacturing (NAICS 3116) | | | | | |
|--|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 53 | 59 | 20 | 2 | |
| British Columbia | 38 | 39 | 15 | 2 | |
| Manitoba | 21 | 31 | 5 | 1 | |
| New Brunswick | 7 | 3 | 0 | 1 | |
| Newfoundland | 12 | 5 | 1 | 0 | |
| NWT | 0 | 0 | 0 | 0 | |
| Nova Scotia | 6 | 9 | 5 | 0 | |
| Nunavut | 0 | 1 | 0 | 0 | |
| Ontario | 96 | 177 | 38 | 9 | |
| PEI | 0 | 3 | 0 | 0 | |
| Quebec | 98 | 110 | 40 | 5 | |
| Saskatchewan | 35 | 17 | 5 | 2 | |
| Yukon Territory | 0 | 0 | 0 | 0 | |
| CANADA | 366 | 454 | 129 | 22 | |
| % Distribution * | 37.70% | 46.80% | 13.30% | 2.30% | |

| Other Food Manufacturing (NAICS 3119) | | | | | |
|--|---|---------------|-------------------|---------------|---------------|
| Province or Territory | Employment Size Category (Number of employees) | | | | Large 500+ |
| | Micro 1-4 | Small 5-99 | Medium 100-499 | Large 500+ | |
| Alberta | 31 | 25 | 3 | 1 | |
| British Columbia | 57 | 51 | 4 | 0 | |
| Manitoba | 15 | 8 | 1 | 0 | |
| New Brunswick | 3 | 9 | 2 | 0 | |
| Newfoundland | 3 | 2 | 0 | 0 | |
| NWT | 0 | 0 | 0 | 0 | |
| Nova Scotia | 8 | 3 | 1 | 0 | |
| Nunavut | 0 | 0 | 0 | 0 | |
| Ontario | 102 | 107 | 22 | 2 | |
| PEI | 2 | 2 | 1 | 0 | |
| Quebec | 86 | 93 | 10 | 1 | |
| Saskatchewan | 7 | 6 | 0 | 0 | |
| Yukon Territory | 1 | 0 | 0 | 0 | |
| CANADA | 315 | 306 | 44 | 4 | |
| % Distribution * | 47.10% | 45.70% | 6.60% | 0.60% | |

Gross Domestic Product (millions) at Base Prices – Manufacturing Industries (1997 Chained Dollars*)

| INDUSTRY | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|----------------|----------------|----------------|------------------|------------------|
| All industries | 943,737 | 959,620 | 991,870 | 1,013,899 | 1,044,583 |
| Manufacturing | 177,618 | 170,574 | 174,647 | 174,820 | 181,605 |
| Transportation equipment manufacturing | 28,104 | 24,966 | 26,108 | 25,900 | 27,523 |
| Primary and fabricated metal products manufacturing | 24,815 | 24,264 | 24,673 | 24,684 | 25,510 |
| Chemical manufacturing | 14,926 | 15,475 | 16,171 | 16,514 | 17,596 |
| Food manufacturing | 15,499 | 16,408 | 16,712 | 16,677 | 17,403 |
| Fabricated metal product manufacturing | 13,160 | 12,793 | 12,892 | 12,880 | 13,467 |
| Wood product manufacturing | 11,524 | 10,997 | 11,964 | 12,395 | 13,135 |
| Machinery manufacturing | 11,383 | 11,517 | 11,639 | 11,443 | 12,340 |
| Primary metal manufacturing | 11,591 | 11,421 | 11,757 | 11,784 | 11,987 |
| Paper manufacturing | 12,035 | 11,400 | 11,740 | 11,865 | 11,630 |
| Plastics and rubber products manufacturing | 9,138 | 9,038 | 10,005 | 10,035 | 10,343 |
| Information and communication technologies, manufacturing | 17,070 | 10,926 | 8,690 | 8,586 | 9,594 |
| Computer and electronic product manufacturing | 14,963 | 8,813 | 7,385 | 7,466 | 8,429 |
| Furniture and related product manufacturing | 5,241 | 5,507 | 5,778 | 5,799 | 5,915 |
| Non-metallic mineral product manufacturing | 4,566 | 4,775 | 5,175 | 5,475 | 5,663 |
| Printing and related support activities | 5,042 | 5,618 | 5,522 | 5,606 | 5,658 |
| Beverage and tobacco product manufacturing | 4,896 | 4,942 | 4,828 | 4,646 | 4,672 |
| Electrical equipment, appliance and component manufacturing | 4,573 | 4,638 | 4,322 | 4,083 | 4,244 |
| Miscellaneous manufacturing | 3,142 | 3,171 | 3,319 | 3,368 | 3,399 |
| Clothing manufacturing | 3,778 | 3,754 | 3,653 | 3,419 | 3,088 |
| Textile and textile product mills | 2,703 | 2,575 | 2,420 | 2,209 | 2,153 |
| Petroleum and coal products manufacturing | 1,741 | 1,859 | 1,909 | 1,992 | 2,017 |
| Textile mills | 1,596 | 1,487 | 1,379 | 1,252 | 1,192 |
| Textile product mills | 1,100 | 1,079 | 1,031 | 947 | 949 |
| Leather and allied product manufacturing | 437 | 380 | 323 | 280 | 251 |

Source: Statistics Canada, CANSIM, tables 379-0017 and 379-0020

*Chain indexes are obtained by linking price (or volume) indexes for consecutive periods; the short-term movements which are linked are calculated using weighting patterns appropriate to the period concerned.

Gross Domestic Product (millions) 1997 Constant Dollars

| Food Manufacturing Subsector | 2000 | 2001 | 2002 | 2003 | 2004 | % Change 2000-2004 |
|--|---------------|---------------|---------------|---------------|---------------|-----------------------|
| Animal food manufacturing [3111] | 936 | 996 | 1,013 | 989 | 976 | 4.3% |
| Grain and oilseed milling [3112] | 1,139 | 1,099 | 1,114 | 1,122 | 1,153 | 1.2% |
| Sugar and confectionery product manufacturing [3113] | 1,163 | 1,309 | 1,300 | 1,390 | 1,471 | 26.5% |
| Fruit and vegetable preserving and specialty food manufacturing [3114] | 2,074 | 2,189 | 2,243 | 2,166 | 2,309 | 11.3% |
| Dairy product manufacturing [3115] | 2,067 | 2,211 | 2,203 | 2,257 | 2,274 | 10.0% |
| Meat product manufacturing [3116] | 3,361 | 3,607 | 3,536 | 3,382 | 3,770 | 12.2% |
| Seafood product preparation and packaging [3117] | 893 | 895 | 994 | 994 | 1,017 | 13.9% |
| Bakeries and tortilla manufacturing [3118] | 2,099 | 2,296 | 2,375 | 2,428 | 2,542 | 21.1% |
| Other food manufacturing [3119] | 1,802 | 1,914 | 2,019 | 2,035 | 2,018 | 12.0% |
| Total Food manufacturing [311] | 15,534 | 16,516 | 16,797 | 16,763 | 17,530 | 12.8% |

Source: Statistics Canada, CANSIM Table 379-0017

Aggregates are not always equal to the sum of their components from 1981 to 1996. This is caused by changing the set of relative prices when a new base year is adopted. To avoid any discontinuity, all levels of aggregation were linked back to 1981 using their original movement. For some of the lowest levels of aggregation, it is not possible to have a homogeneous series from 1981 to the present. For that reason, special industry groupings that provide relatively good continuity were created back to 1981. For quarterly data, refer to CANSIM table 3790018. For monthly data, refer to CANSIM table 3790019.

This table contains revised estimates of Gross Domestic Product by industry back to January 1981.

Canadian Exports – Food Manufacturing

Canadian Exports - Food Manufacturing Top 10 Countries

(millions of Canadian dollars)

| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
|------------------------------|---------------|---------------|---------------|---------------|---------------|
| United States (U.S.) | 10,586 | 11,958 | 12,807 | 12,443 | 13,158 |
| Japan | 1,458 | 1,597 | 1,632 | 1,551 | 1,608 |
| China | 219 | 215 | 337 | 397 | 553 |
| Mexico | 242 | 415 | 354 | 267 | 543 |
| United Kingdom (U.K.) | 177 | 184 | 153 | 189 | 198 |
| Taiwan (Taipei) | 129 | 147 | 196 | 211 | 197 |
| Korea, South | 227 | 178 | 227 | 137 | 170 |
| Australia | 65 | 89 | 100 | 131 | 159 |
| Hong Kong | 159 | 123 | 79 | 92 | 124 |
| Denmark | 76 | 75 | 112 | 114 | 117 |
| SUB-TOTAL | 13,339 | 14,982 | 15,996 | 15,533 | 16,826 |
| OTHERS | 964 | 1,196 | 1,148 | 1,200 | 1,328 |
| TOTAL (ALL COUNTRIES) | 14,303 | 16,179 | 17,145 | 16,733 | 18,154 |

Source: Industry Canada – Trade Data Online

Canadian Exports – Raw Agricultural Products

Canadian Exports - Cattle Ranching and Farming Top 10 Countries

| (thousands of Canadian dollars) | | | | | |
|---------------------------------|------------------|------------------|------------------|----------------|--------------|
| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
| United States (U.S.) | 1,140,360 | 1,665,689 | 1,830,538 | 597,655 | 7,894 |
| Taiwan (Taipei) | 0 | 0 | 15 | 504 | 241 |
| Japan | 136 | 275 | 749 | 173 | 208 |
| Germany | 10 | 37 | 0 | 0 | 33 |
| China | 922 | 55 | 6,061 | 19 | 10 |
| Hong Kong | 0 | 0 | 10 | 12 | 6 |
| Korea, South | 0 | 374 | 198 | 308 | 0 |
| Turkey | 0 | 0 | 0 | 78 | 0 |
| Austria | 0 | 0 | 0 | 0 | 0 |
| Greece | 0 | 0 | 0 | 0 | 0 |
| Sub-Total Cattle | 1,141,427 | 1,666,429 | 1,837,573 | 598,750 | 8,390 |

Canadian Exports - Poultry and Egg Production Top 10 Countries

| (thousands of Canadian dollars) | | | | | |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
| United States (U.S.) | 43,223 | 51,428 | 60,392 | 49,954 | 55,698 |
| Germany | 9,123 | 8,838 | 11,605 | 11,523 | 11,338 |
| Turkey | 1,951 | 1,759 | 1,467 | 2,333 | 5,388 |
| Austria | 1,322 | 1,908 | 2,663 | 4,407 | 5,172 |
| Taiwan (Taipei) | 27 | 29 | 141 | 7 | 31 |
| Japan | 189 | 502 | 459 | 732 | 27 |
| Hong Kong | 10 | 32 | 34 | 0 | 7 |
| Greece | 0 | 0 | 0 | 32 | 0 |
| China | 26 | 27 | 74 | 21 | 0 |
| Korea, South | 4 | 0 | 0 | 0 | 0 |
| Sub-Total Poultry & Egg | 55,875 | 64,524 | 76,834 | 69,009 | 77,661 |

Canadian Exports - Animal Aquaculture Top 10 Countries

| (thousands of Canadian dollars) | | | | | |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|
| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
| United States (U.S.) | 377,834 | 438,029 | 471,188 | 350,881 | 315,018 |
| Taiwan (Taipei) | 6,222 | 10,466 | 3,104 | 7,104 | 8,829 |
| Japan | 3,648 | 4,335 | 5,531 | 7,617 | 6,621 |
| Hong Kong | 720 | 939 | 514 | 800 | 1,068 |
| Korea, South | 69 | 74 | 119 | 358 | 541 |
| China | 245 | 50 | 1,028 | 322 | 223 |
| Germany | 22 | 56 | 0 | 66 | 64 |
| Austria | 0 | 20 | 12 | 69 | 0 |
| Greece | 0 | 0 | 0 | 0 | 0 |
| Turkey | 0 | 0 | 0 | 0 | 0 |
| Sub-Total Aquaculture | 388,761 | 453,970 | 481,496 | 367,217 | 332,364 |

Canadian Exports - Hog and Pig Farming Top 10 Countries

| (thousands of Canadian dollars) | | | | | |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|
| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
| United States (U.S.) | 446,294 | 554,822 | 485,092 | 556,446 | 701,296 |
| Korea, South | 0 | 184 | 113 | 394 | 380 |
| Japan | 0 | 4 | 0 | 0 | 90 |
| Germany | 0 | 0 | 33 | 40 | 44 |
| Taiwan (Taipei) | 0 | 0 | 0 | 99 | 0 |
| China | 161 | 0 | 729 | 0 | 0 |
| Austria | 0 | 0 | 0 | 0 | 0 |
| Greece | 0 | 0 | 0 | 0 | 0 |
| Hong Kong | 0 | 0 | 0 | 0 | 0 |
| Turkey | 0 | 0 | 0 | 0 | 0 |
| Sub-Total Hog & Pig | 446,455 | 555,010 | 485,968 | 556,979 | 701,811 |

Canadian Exports - Sheep and Goat Farming Top 10 Countries

| (thousands of Canadian dollars) | | | | | |
|---------------------------------|--------------|---------------|---------------|---------------|--------------|
| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
| China | 0 | 158 | 894 | 1,908 | 1,433 |
| United States (U.S.) | 9,426 | 13,929 | 20,576 | 11,862 | 751 |
| Hong Kong | 0 | 0 | 0 | 4 | 0 |
| Germany | 0 | 48 | 162 | 0 | 0 |
| Austria | 0 | 3 | 0 | 0 | 0 |
| Greece | 0 | 0 | 0 | 0 | 0 |
| Korea, South | 0 | 0 | 0 | 0 | 0 |
| Taiwan (Taipei) | 0 | 0 | 0 | 0 | 0 |
| Japan | 0 | 0 | 0 | 0 | 0 |
| Turkey | 0 | 0 | 0 | 0 | 0 |
| Sub-Total Sheep and Goat | 9,426 | 14,138 | 21,632 | 13,773 | 2,184 |

Canadian Exports - Other Animal Top 10 Countries

| (thousands of Canadian dollars) | | | | | |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|
| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
| United States (U.S.) | 145,079 | 156,880 | 157,267 | 134,603 | 136,779 |
| Hong Kong | 60,743 | 75,052 | 66,900 | 74,614 | 90,793 |
| China | 5,183 | 1,201 | 8,526 | 10,287 | 15,646 |
| Korea, South | 26,061 | 18,643 | 22,112 | 12,504 | 13,458 |
| Germany | 6,941 | 9,328 | 8,616 | 10,551 | 9,426 |
| Japan | 7,629 | 7,644 | 4,727 | 6,921 | 9,395 |
| Greece | 6,076 | 8,559 | 6,737 | 6,562 | 6,600 |
| Austria | 400 | 238 | 119 | 67 | 723 |
| Taiwan (Taipei) | 1 | 0 | 0 | 7 | 142 |
| Turkey | 75 | 200 | 0 | 4 | 8 |
| Sub-Total Other Animal | 258,189 | 277,745 | 275,005 | 256,119 | 282,970 |

Canadian Exports – Raw Agricultural Products (continued)

Canadian Exports - Oilseed (except soybean) Farming
Top 10 Countries

(thousands of Canadian dollars)

| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
|-------------------------------------|------------------|------------------|------------------|------------------|------------------|
| Japan | 546,737 | 580,311 | 649,838 | 717,076 | 701,606 |
| Mexico | 228,557 | 252,742 | 188,808 | 249,166 | 430,237 |
| United States (U.S.) | 165,520 | 163,327 | 170,099 | 172,061 | 280,406 |
| Belgium | 102,268 | 140,039 | 238,828 | 221,896 | 169,055 |
| China | 301,644 | 381,068 | 25,391 | 119,047 | 103,685 |
| Venezuela | 1,743 | 1,494 | 1,158 | 1,117 | 1,309 |
| Algeria | 149 | 868 | 1,051 | 1,376 | 418 |
| Italy (includes Vatican City State) | 209 | 952 | 367 | 529 | 372 |
| Philippines | 9 | 14 | 55 | 217 | 174 |
| Indonesia (includes East Timor) | 693 | 74 | 127 | 138 | 69 |
| Sub-Total Oilseed | 1,347,531 | 1,520,888 | 1,275,721 | 1,482,621 | 1,687,331 |

Canadian Exports - Wheat Farming
Top 10 Countries

(thousands of Canadian dollars)

| Country | 2000 | 2001 | 2002 | 2003 | 2004 |
|-------------------------------------|------------------|------------------|------------------|------------------|------------------|
| China | 105,237 | 134,171 | 43,519 | 44,948 | 655,872 |
| Japan | 296,928 | 335,155 | 354,013 | 266,124 | 271,386 |
| Italy (includes Vatican City State) | 64,250 | 112,769 | 75,951 | 277,028 | 236,310 |
| United States (U.S.) | 360,558 | 459,603 | 418,224 | 159,540 | 215,635 |
| Mexico | 179,663 | 231,044 | 176,316 | 172,250 | 167,856 |
| Venezuela | 177,390 | 203,841 | 171,222 | 125,310 | 162,891 |
| Algeria | 351,408 | 198,592 | 321,573 | 203,999 | 149,457 |
| Indonesia (includes East Timor) | 140,777 | 140,499 | 137,863 | 69,377 | 146,349 |
| Philippines | 113,340 | 160,397 | 108,126 | 119,690 | 130,622 |
| Belgium | 20,573 | 29,553 | 24,396 | 93,665 | 92,409 |
| Sub-Total Wheat | 1,810,125 | 2,005,625 | 1,831,204 | 1,531,930 | 2,228,788 |

Top Canadian Agri-food Imports (in \$ millions)

| Product | 2004 \$ Value |
|---|----------------------|
| Wine, including fortified, bottled | 1,039 |
| Food preparations nes | 694 |
| Biscuits and crackers | 443 |
| Soya-bean oil-cake | 380 |
| Dog or cat food for retail | 378 |
| Grapes, fresh | 360 |
| Beer | 348 |
| Mixtures for the food or drink industries | 331 |
| Chocolate and preparations | 318 |

Source: Statistics Canada

Capital investment in the food processing sector, by food processing industry group, showing average annual change, Canada, 1994 to 2003

| | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | Average annual change |
|---|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------|
| Food Processing Industries¹ | millions of current dollars | | | | | | | | | | % |
| Animal food manufacturing | 56 | 87 | 83 | 130 | 164 | 108 | 79 | 88 | 106 | 82 | 0.8 |
| Grain and oilseed milling | 137 | 180 | 207 | 180 | 119 | 140 | 85 | 84 | 83 | 110 | -3.6 |
| Sugar and confectionery product manufacturing | 87 | 77 | 124 | 111 | 168 | 161 | 209 | 154 | 242 | 133 | 4 |
| Fruit and vegetable preserving and specialty food manufacturing | 119 | 179 | 262 | 159 | 211 | 215 | 277 | 259 | 254 | 254 | 2.9 |
| Dairy product manufacturing | 173 | 179 | 157 | 172 | 174 | 244 | 137 | 159 | 178 | 182 | 0 |
| Meat product manufacturing | 204 | 203 | 355 | 148 | 383 | 476 | 251 | 206 | 218 | 265 | 0.5 |
| Seafood product preparation and packaging | 74 | 56 | 67 | 90 | 59 | 60 | 41 | 67 | 102 | 63 | 0.1 |
| Bakeries and tortilla manufacturing | 211 | 221 | 190 | 251 | 162 | 181 | 121 | 150 | 209 | 176 | -1.4 |
| Other food products | 109 | 131 | 124 | 120 | 75 | 117 | 127 | 154 | 167 | 163 | 1.9 |
| Food manufacturing | 1,171 | 1,311 | 1,571 | 1,361 | 1,516 | 1,699 | 1,321 | 1,350 | 1,800 | 1,428 | 0.9 |
| All manufacturing | 14,990 | 17,258 | 18,369 | 20,533 | 21,369 | 21,234 | 21,836 | 18,819 | 17,174 | 17,788 | 0.5 |
| 1. North American Industry Classification System. | | | | | | | | | | | |
| Sources: Statistics Canada, CANSIM: Table 029-0009. | | | | | | | | | | | |

APPENDIX C: EXISTING RELEVANT FEDERAL PUBLIC SECTOR PROGRAMMING

| PROGRAM NAME | WEB LINK AND DESCRIPTION |
|---|---|
| <p>Advancing Canadian Agriculture and Agri-Food (ACAAF)</p> <p>March 2005 (site last updated)</p> | <p>http://www.agr.gc.ca/acaaf/index_e.html</p> <p>The Advancing Canadian Agriculture and Agri-Food (ACAAF) program is a five-year, \$240 million program aimed at positioning Canada's agriculture and agri-food sector at the leading edge to seize new opportunities. ACAAF was launched in April 2004 as a successor to the Canadian Adaptation and Rural Development (CARD) Fund, and will continue CARD's innovative and cooperative approach to funding projects at the national, multi-regional and regional level.</p> <p>Under the ACAAF program, projects are delivered using an innovative industry-led approach at both the national and regional levels.</p> |
| <p>Career Focus Program</p> <p>August 2004 (site last updated)</p> | <p>http://res2.agr.ca/ado/program/kit_e.htm</p> <p>At Agriculture and Agri-Food Canada, the Career Focus Program will contribute \$1.1 million to research projects that employ recent graduates in agri-food science and veterinary medicine. Each project will be eligible to receive up to \$12,000 in matching funds.</p> |
| <p>Canadian Food Safety and Quality Program (CFSQP): System Development Component</p> <p>March 2005 (site last updated)</p> | <p>http://www.agr.gc.ca/cb/apf/index_e.php?section=fd_al&group=docu&page=sd</p> <p>The Systems Development Component of the Canadian Food Safety and Quality Program (CFSQP) is a partnership between Canadian governments and national agriculture and agri-food organizations.</p> <p>The overall goal of the Systems Development Component is to facilitate industry momentum in developing and implementing government-recognized food safety and food quality process-control systems throughout the entire food chain.</p> <p>The CFSQP Systems Development Component is an investment of \$62 million, and consists of three elements: food safety, food quality, and traceability.</p> |
| <p>National Research Council Plant Biotechnology Institute</p> | <p>http://www.pbi-ibp.nrc-cnrc.gc.ca/</p> <p>Examples of investment:</p> <ul style="list-style-type: none"> <input type="checkbox"/> to develop novel, reliable and publicly acceptable host plant systems for molecular farming applications; <input type="checkbox"/> to develop new, elite breeding lines of brassica crops such as canola crops which would have increased seed oil content and ultra-high levels of erucic acid; <input type="checkbox"/> to modify flax seed oil composition and content through the use of biotechnology. <input type="checkbox"/> to enhance the DNA technology unit to provide improved DNA sequencing, analysis and synthesis to Saskatchewan's ag biotech industry; <input type="checkbox"/> to provide the local ability to characterize in-depth macro-molecules particularly protein-based vaccines, pharmaceuticals and industrial and food enzymes. |

| PROGRAM NAME | WEB LINK AND DESCRIPTION |
|---|---|
| POS Pilot Plant Corporation | http://www.pos.ca Provide developmental facilities for specialty oils, specialty feeds, therapeutics and nutraceuticals. |
| Agriculture and Agri-Food Canada | http://www.agr.gc.ca/site_e.phtml Numerous programs to upgrade research and development for identification and concentration of high value crop constituents. |
| Planning and Assessment for Value-Added Enterprises (PAVE) Program July 2004 (site last updated) | http://www.agr.gc.ca/ren/plan/index_e.php?page=intro Planning and Assessment for Value-Added Enterprises (PAVE) will provide farmers with financial assistance to retain the services of business planning professionals and develop plans for value-added projects. Farmers will receive assistance to hire the appropriate expertise to prepare feasibility assessments and develop comprehensive business plans. These plans will improve the chances for a successful launch or expansion of value-added enterprises. As part of the service to the clients, the consultants will provide counseling that will improve farmers' ability to present their plans to capital providers and to use their plans as a management tool for the launch or expansion of their enterprise. In some cases, these opportunities may be pursued by individual farmers or by farmers acting collectively. |
| Food Safety Enhancement Program September 2004 (site last updated) | http://www.inspection.gc.ca/english/fssa/polstrat/haccp/haccpe.shtml The Food Safety Enhancement Program (FSEP) is the Canadian Food Inspection Agency's (CFIA) approach to encourage and support the development, implementation and maintenance of Hazard Analysis Critical Control Point (HACCP) systems in all federally registered establishments of the meat, dairy, honey, maple syrup, processed fruit and vegetable, shell egg, processed egg and poultry hatchery sectors. The core of FSEP is the internationally recognized HACCP system, a set of principles for controlling food safety. Under HACCP, processors implement process controls throughout production. |
| Food Research Program October 2003 (site last updated) | http://res2.agr.ca/guelph/index_e.htm The Food Research Program carries out research and technology transfer in support of the agri-food sector. The focus is to improve food quality, reduce processing costs, add value to agricultural raw materials for food and non-food uses, and support a healthy diet for Canadians. The full-time staff of about 60, including 25 professionals, is organized in four teams: Functional Foods and Nutraceuticals; Food Preservation Technologies; Molecular and Cellular Biology; and Structure and Function. The multi-disciplinary teams of scientists have specific goals, but at the same time interact with other teams to effectively utilize the expertise available. (Choose "Programs" at the left of the web page for more details on each area.) |

| PROGRAM NAME | WEB LINK AND DESCRIPTION |
|---|--|
| Agriculture and Agri-Food Canada (AAFC)/Natural Science and Engineering Research Council (NSERC) Research Partnerships Program August 2003 (site last updated) | http://res2.agr.gc.ca/indust/nserc_e.htm The Agriculture and Agri-Food Canada (AAFC)/Natural Science and Engineering Research Council (NSERC) Research Partnerships Program provides grants to universities to conduct research in collaboration with Canadian companies. AAFC, NSERC and industry typically split the costs of the projects equally three ways. The idea is to boost industry's role in funding research. |
| Matching Investment Initiative August 2003 (site last updated) | http://res2.agr.gc.ca/indust/mii/index_e.htm The Matching Investment Initiative is a way to increase collaborative research activity between the private sector and Agriculture and Agri-Food Canada. Under the Matching Investment Initiative, the Department can match up to one-for-one industry R&D contributions to collaborative research projects. |
| Canadian Agriculture and Food International (CAFI) Program October 2003 (site last updated) | http://www.agr.gc.ca/int/cafi-picaa/index_e.php?page=what-quoi The CAFI Program supports industry in taking integrated, long-term, value-chain-based action to increase presence in global markets. The CAFI Program is designed to support industry in building long-term strategies that will position them for success in key markets and respond to increasing consumer demands and global competition. The Program is to help industry improve access to global markets for Canadian agricultural products and to strengthen the sector's capacity to market their products abroad. The Program provides matching funding for industry activities that enhance and promote Canada's reputation as the world leader in supplying safe, high-quality agriculture, agri-food, beverage and seafood products that meet the changing demands of world markets. |
| Canadian Food Safety Adaptation Program September 2003 (site last updated) | http://www.inspection.gc.ca/english/fssa/adapt/adapte.shtml The Office of CFSAP's role is to administer and provide financial and technical support to a contribution program targeted to enhance food safety management programs using HACCP (Hazard Analysis Critical Control Point). Funded under Agriculture and Agri-Food Canada's Canadian Adaptation and Rural Development (CARD) Fund, the Program is administered by the Canadian Food Inspection Agency (CFIA). CFSAP cost-shares food industry activities that will enable national associations or groups who are involved directly or indirectly in the production, marketing, distribution and preparation of food to develop risk management strategies, tools and systems to enhance food safety from "gate to plate." The use of HACCP principles as a tool is the common denominator. |
| On-Farm Food Safety Recognition Program February 2005 (site last updated) | http://www.inspection.gc.ca/english/fssa/polstrat/reco/recoe.shtml The On-Farm Food Safety Recognition Program is one part of a world-leading agricultural program, involving small-to-large-scale farmers and producers, the Canadian agriculture industry and all levels of government. The Canadian On-Farm Food Safety Program provides national producer organizations with the |

| PROGRAM NAME | WEB LINK AND DESCRIPTION |
|---|---|
| | opportunity to develop strategies and tools to educate producers and to implement the programs. |
| Canadian On-Farm Food Safety Program (COFFSP) October 2003 (site last updated) | http://www.agr.gc.ca/policy/adapt/national_initiatives/coffsp.phtml The Canadian On-Farm Food Safety Program (COFFSP) provides an opportunity for national commodity associations to develop the strategies and the necessary tools to educate producers and to initiate implementation of on-farm food safety initiatives consistent with the Hazard Analysis Critical Control Point definitions and principles established by the Codex Alimentarius Commission and with the Food Safety Enhancement Program being implemented by the Canadian Food Inspection Agency. |