OVERVIEW OF THE FOOD PROCESSING INDUSTRY

DECEMBER 2005
Overview of the Food Processing Industry

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910-130 Albert Street
Ottawa, ON
K1P 5G4

The “Diagnostic Analysis of the Canadian Food Processing Sector” project is funded by the Government of Canada’s Sector Council Program

The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.
ACKNOWLEDGMENTS

The National Seafood Sector Council wishes to extend its appreciation to all the organizations and individuals who contributed their time and effort to the development of the “Overview of the Food Processing Industry” Diagnostic Study. The Executive Summary is available on our website.

The success of this overview would not have been possible without the individuals who donated their time to talk with the researchers and participated in surveys.

We would like to thank the Diagnostic Analysis of the Canadian Food Processing Sector Steering Committee for their invaluable input and direction throughout this first phase of the project.

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# Table of Contents

**Executive Summary** ................................................................................................................................. 3

**1.0 Introduction** ........................................................................................................................................ 4

1.1 Study Context........................................................................................................................................... 4

1.2 Study Objectives ..................................................................................................................................... 4

1.3 Report Outline ......................................................................................................................................... 5

**PART I** .................................................................................................................................................... 6

**2.0 Background - Environmental Scan** .................................................................................................... 7

2.1 Sector Overview ..................................................................................................................................... 7

2.2 Industry Structure ................................................................................................................................. 7

2.3 Employment by Sector .......................................................................................................................... 9

**3.0 Food Processing Industries** ................................................................................................................. 11

**4.0 Categories** .......................................................................................................................................... 19

**5.0 Consumer Trends** .............................................................................................................................. 20

**6.0 Customer Trends** ................................................................................................................................ 21

**7.0 Facility Considerations** ....................................................................................................................... 22

**Summary - Part I** ...................................................................................................................................... 22

**PART II** .................................................................................................................................................... 23

**8.0 Industry Realities** ............................................................................................................................... 24

**9.0 Human Resource Needs and Challenges** ........................................................................................ 37

9.1 Essential Skills ...................................................................................................................................... 37

9.2 Role of Immigration .............................................................................................................................. 38

9.3 Lack of Awareness/Promotion of Industry ............................................................................................ 40

9.4 Working Conditions .............................................................................................................................. 41

9.5 Retention ............................................................................................................................................... 41

9.6 Attrition ................................................................................................................................................. 42

9.7 Turnover ............................................................................................................................................... 43

9.8 Wage Rates ............................................................................................................................................ 44

9.9 Unionization ........................................................................................................................................... 45

9.10 Seasonality ............................................................................................................................................ 46

**Summary - Part II** ...................................................................................................................................... 47

**10.0 Needs Summary** ............................................................................................................................... 48

**11.0 Action Plan** ....................................................................................................................................... 51

11.1 Option #1 - National Food Processing Sector Council ........................................................................ 51

11.2 Option #2 - Skills Development Centre ............................................................................................. 55

11.3 Option #3 - Annual Industry Conference ............................................................................................ 57

**Glossary** .................................................................................................................................................... 59

**Bibliography** ........................................................................................................................................... 61

**Appendices** ............................................................................................................................................. 63
The food processing industry in Canada is under constant pressure from both the domestic and worldwide marketplaces to improve efficiencies and reduce costs. A major contributor to this is the considerable impact of customer consolidation in the retail and food service sectors in Canada, which has led to fewer buyers requiring larger volumes at reduced margins. However, the solution is not as easy as increasing volumes to gain economies of scale.

Competing in a global market has heightened legislative and regulatory requirements as the government works to protect the safety of food destined for national and international consumption. This has put pressure on the food processing sector to implement higher food safety standards which sometimes challenges the ability to produce products competitively. Other issues impacting trade include the lack of congruency among standards for trading partners and the realities of the competitiveness of the Canadian food processing industry which is challenged by the rising Canadian dollar.

While the industry strives for efficiencies despite these factors they continue to be faced with human resources challenges. Adopting technology, whether that be by investing in more advanced equipment or tighter system monitoring such as inventory controls for better management, is but one solution that is helping increase efficiencies in production. However, for many food processors, increasing labour productivity is the key in terms of profitability. Major consideration needs to be given to the industry’s ability to overcome recruitment and retention issues of general and skilled labour as well as reflect on the changing occupational composition of the labour force with regards to skills development to address the advancing needs of industry. In order to successfully meet these evolving needs, food processors will require a flexible workforce with a new set of essential and transferable skills.

The industry lacks overall coordination and collaboration with regards to human resource development. Although diverse, the food processing industry has many commonalities among sectors and businesses that could benefit from a shared training and information forum.

Our research findings suggest that there are several common needs among the various food processing industries in Canada with regards to human resources. These needs may be characterized into three pillars: Communication, Market Knowledge and Training and Skills Development. Each of these areas is vital to preparing the industry’s workforce to meet the diverse challenges of today’s global environment.

We have identified three options that may assist in addressing the major needs facing the industry. Our recommended approach includes a national, lead organization that would be responsible for the advancement of communication, market knowledge and training and skill development. A collaborative, Pan-Canadian initiative is recommended as it increases the competitiveness of the greatest number of regions, firms and sectors; thus better positioning the industry for success at home and abroad.
1.0 INTRODUCTION

1.1 Study Context

The National Seafood Sector Council, with support from Human Resource Skills Development Canada, commissioned this Diagnostic Study of the Food Processing Sector to provide the context for understanding the sectoral and occupational structure and human resource trends and challenges taking place within the various segments of the food processing industry.

For over a decade, the National Seafood Sector Council has been instrumental in preparing and advancing the seafood industry’s human resources to meet evolving competitive demands through the development and execution of numerous industry studies, as well as the development of course and training material.

1.2 Study Objectives

The ultimate research objective of this study is to provide an accurate context for understanding the sectoral and occupational structure and human resource trends and challenges within the food processing sector. Specifically, the research objectives are:

- Provide a broad profile of the food manufacturing industry and occupations therein;
- Identify future trends, issues and challenges in the sector and how they affect processors;
- Provide a description of current and past relevant initiatives and programs for the Canadian food processing sector, especially with respect to human resource development; and,
- Assess the feasibility of moving forward and provide recommendations for a collaborative structure/approach for addressing human resource development within the food processing sector.

Photo: Saskatchewan Food Industry Development Centre Inc.
1.3 Report Outline

Part I
- Background – Environmental Scan
- Overview of food manufacturing industries and occupations
- Category review
- Consumer trends
- Customer trends
- Facility considerations

Part II
- Detailed review of industry realities
- Stakeholder interviews
- Human resource needs and challenges
- Action Plan – Options

Other
- Glossary of Terms
- Bibliography
- Appendices

Part 1 of the report provides a broad profile of the food manufacturing industry and the occupations therein. This overview should not overshadow the complexity of the industry; rather identify the major issues and challenges as they ultimately effect and relate to labour and skills development. The food processing sectors are further reviewed by category which helps gain a richer understanding of the context in which the various food processing industries compete.

Consumer and customer trends detail the environment in which food processing manufacturers operate and the subsequent changes and demands which they impose upon production. These translate into facility considerations as food processors strive to serve their customer and consumer base as well as comply with regulations and legislation imposed by government.

Part 2 of the report presents industry realities which are further explored and researched utilizing interviews with food processors of various sizes in different types of food processing industries. The interviews strive to identify factors that are impacting food processors in terms of competitiveness and human resource management.

The recommended action plan identifies three pillars of common needs that would help further the industry’s competitiveness with regards to human resource training and development. Three alternative courses of action are identified that address all, some, or one of the identified pillars.
PART I
2.0 Background – Environmental Scan

The Canadian food processing industry is both diverse and complex. The parameters of analysis within this report are intended to provide a general overview of the industry. Although the food and beverage processing sectors are often referred to as one industry, this report intends to focus solely on the food sector. Once the scope of findings in the food processing sector is more narrowly defined, it may be easier to assess the differences and commonalities within the beverage industry.

2.1 Sector Overview

This section provides an overview of the study’s scope of analysis including the food processing industry and all sub-sectors. The following assumptions have been made throughout the report:

- Beverage processors have been distinguished from food processors and have been excluded from analysis.
- Primary processing has been defined as:
  The limited alteration of raw materials from their primary state.
- Secondary processing has been defined as:
  The conversion of ingredients by physically breaking down (cutting, dicing, slicing, etc.) and adding flavour and packaging.
- Further processing has been defined as:
  Manipulating a product beyond its natural state by extraction, refining, injecting, coating, marinating, smoking, cooking, canning and other forms of pre-preparation.
- Large, medium and small firms have been defined as:
  - Large – Sales of $101 million and greater, more than 200 employees
  - Medium – Sales of $21 million - $100 million, between 51-200 employees
  - Small – Sales of $5 million – $20 million, less than 50 employees

2.2 Industry Structure

Canada’s food processing industry is extremely diverse. The industry consisted of more than 5,545 firms\(^1\) in 2003 representing various sizes, structures and sub-sectors that produce over $50 billion in annual sales.

---

\(^1\) Statistics Canada, Annual Survey of Manufacturers, CANSIM, Table 301-0003.
Table 2.1 – Selected Key Data by Food Processing Industry - 2001

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Firms</th>
<th>Annual Sales Estimate</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal food manufacturing</td>
<td>562</td>
<td>$4 billion</td>
<td>10,900</td>
</tr>
<tr>
<td>Grain and oilseed milling</td>
<td>177</td>
<td>$8 billion</td>
<td>7,900</td>
</tr>
<tr>
<td>Sugar and confectionary product manufacturing</td>
<td>189</td>
<td>$3 billion</td>
<td>17,700</td>
</tr>
<tr>
<td>Fruit and vegetable preserving and specialty food manufacturing</td>
<td>372</td>
<td>$3 billion</td>
<td>20,400</td>
</tr>
<tr>
<td>Dairy product manufacturing</td>
<td>434</td>
<td>$11 billion</td>
<td>20,400</td>
</tr>
<tr>
<td>Meat product manufacturing</td>
<td>769</td>
<td>$14.6 billion</td>
<td>70,500</td>
</tr>
<tr>
<td>Seafood product preparation and packaging</td>
<td>700</td>
<td>$5 billion</td>
<td>25,800</td>
</tr>
<tr>
<td>Bakeries and tortilla manufacturing</td>
<td>1,779</td>
<td>$2.9 billion</td>
<td>48,300</td>
</tr>
<tr>
<td>Other food manufacturing</td>
<td>563</td>
<td></td>
<td>43,700</td>
</tr>
</tbody>
</table>

2 Statistics Canada, Annual Survey of Manufacturers, CANSIM, Table 301-0003
3 http://www.omafra.gov.on.ca/english/stats/food/labforce03.html
2.3 Employment by Sector

The food processing industry in Canada employs approximately 237,744 individuals. Total wages and salaries of the sector accounted for approximately $7 billion in 2001.

Table 2.2 - Wages and Salaries by Food Processing Industry, Canada 2001

<table>
<thead>
<tr>
<th>Food processing industries</th>
<th>Production workers’ wages</th>
<th>Salaries for administrative, office and other non-manufacturing employees</th>
<th>Total wages and salaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal food manufacturing</td>
<td>298,668</td>
<td>139,594</td>
<td>438,262</td>
</tr>
<tr>
<td>Grain and oilseed milling</td>
<td>277,818</td>
<td>81,148</td>
<td>358,966</td>
</tr>
<tr>
<td>Sugar and confectionery product manufacturing</td>
<td>332,711</td>
<td>106,382</td>
<td>439,093</td>
</tr>
<tr>
<td>Fruit and vegetable preserving and specialty food manufacturing</td>
<td>562,822</td>
<td>200,768</td>
<td>763,590</td>
</tr>
<tr>
<td>Dairy product manufacturing</td>
<td>523,026</td>
<td>213,702</td>
<td>736,728</td>
</tr>
<tr>
<td>Meat product manufacturing</td>
<td>1,602,909</td>
<td>371,970</td>
<td>1,974,879</td>
</tr>
<tr>
<td>Seafood product preparation and packaging</td>
<td>464,066</td>
<td>111,821</td>
<td>575,887</td>
</tr>
<tr>
<td>Bakeries and tortilla manufacturing</td>
<td>829,456</td>
<td>206,627</td>
<td>1,036,083</td>
</tr>
<tr>
<td>Other food manufacturing</td>
<td>425,242</td>
<td>235,603</td>
<td>660,845</td>
</tr>
<tr>
<td>All food manufacturing</td>
<td>5,316,718</td>
<td>1,667,615</td>
<td>6,984,333</td>
</tr>
</tbody>
</table>

4 Statistics Canada, Annual Survey of Manufacturers, CANSIM, Table 301-0003
5 Statistics Canada, Annual Survey of Manufacturers, CANSIM, Table 301-0003
6 Statistics Canada, Annual Survey of Manufacturers, CANSIM, Table 301-0003
Table 2.3 – Wages and Salaries by Food Processing Industry

- Animal food manufacturing: 29%
- Grain and oilseed milling: 15%
- Sugar and confectionery product manufacturing: 11%
- Fruit and vegetable preserving and specialty food manufacturing: 11%
- Dairy product manufacturing: 6%
- Meat product manufacturing: 6%
- Seafood product preparation and packaging: 5%
- Bakeries and tortilla manufacturing: 6%
- Other food manufacturing: 9%

Photo: Comité sectoriel de main-d’œuvre en transformation alimentaire

Statistics Canada, Annual Survey of Manufacturers, CANSIM, Table 301-0003
3.0 Food Processing Industries

Food processing is Canada’s third largest manufacturing industry, employing more than 237,744 people\(^8\). The parameters of analysis within this report are intended to provide a general overview of the industry and are segmented into the sub-industries as per Agriculture and Agri-Food Canada’s classification system:

- Animal Food Production
- Grain and Oilseed
- Sugar and Confectionary
- Fruit and Vegetable
- Dairy
- Meat and Poultry
- Fish and Seafood
- Bakery
- Other

Table 3.1 – Number of Establishment and Workers by Food Processing Industry\(^9\)

<table>
<thead>
<tr>
<th>Food processing industries</th>
<th>Establishments</th>
<th>Production Workers</th>
<th>Administration, Office and Other</th>
<th>Total Workforce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal food manufacturing</td>
<td>562</td>
<td>10,252</td>
<td>2,954</td>
<td>13,206</td>
</tr>
<tr>
<td>Grain and oilseed milling</td>
<td>177</td>
<td>6,525</td>
<td>1,633</td>
<td>8,158</td>
</tr>
<tr>
<td>Sugar and confectionery product manufacturing</td>
<td>189</td>
<td>9,872</td>
<td>1,748</td>
<td>11,620</td>
</tr>
<tr>
<td>Fruit and vegetable preserving and specialty food manufacturing</td>
<td>372</td>
<td>20,849</td>
<td>3,737</td>
<td>24,586</td>
</tr>
<tr>
<td>Dairy product manufacturing</td>
<td>434</td>
<td>15,024</td>
<td>5,190</td>
<td>20,214</td>
</tr>
<tr>
<td>Meat product manufacturing</td>
<td>769</td>
<td>58,680</td>
<td>9,229</td>
<td>67,909</td>
</tr>
<tr>
<td>Seafood product preparation and packaging</td>
<td>700</td>
<td>31,743</td>
<td>3,096</td>
<td>34,839</td>
</tr>
<tr>
<td>Bakeries and tortilla manufacturing</td>
<td>1,779</td>
<td>30,972</td>
<td>5,108</td>
<td>36,080</td>
</tr>
<tr>
<td>Other food manufacturing</td>
<td>563</td>
<td>16,449</td>
<td>4,683</td>
<td>21,132</td>
</tr>
<tr>
<td>All food manufacturing</td>
<td>5,545</td>
<td>200,366</td>
<td>37,378</td>
<td>237,744</td>
</tr>
</tbody>
</table>

\(^8\) Statistics Canada, Annual Survey of Manufacturers, CANSIM, Table 301-0003.  
\(^9\) Statistics Canada, Annual Survey of Manufacturers, CANSIM, Table 301-0003.
3.1 Animal Food Production

The animal food production industry in Canada is typically segregated into two sub-industries:

1) Dog and cat food manufacturing; and
2) Other animal food manufacturing.

**Dog and Cat Food Manufacturing**
The majority of dog and cat food manufacturers are located in Ontario (34.6%) and British Columbia (25.6%) with some production in Alberta (12.8%) and Quebec (17.9%). The Canadian dog and cat food industry employs approximately 1,100 people annually. The value of manufacturing shipments increased in 2003 to a total of **$543.3 million**. The Canadian industry is heavily controlled by American brands, yet a total of 17 Canadian brands existed as of 2003 data. Trends in the dog and cat food industries include health and nutrition feeds (including pet organics), low calorie feed alternatives, and gourmet and specialty brands.

**Other Animal Food Manufacturing**
Other animal food production is typically aimed at hogs, beef, dairy and poultry. This sector produces products such as complete feeds for livestock, feed premixes, feed supplements, hay cubes, mineral feed supplements and other pet foods not intended for cats and dogs.

The distribution of other animal food manufacturing establishments in Canada is characterized by a high presence in both Ontario and Quebec, accounting for more than 50 percent of all establishments. Some of the major players in the Canadian animal food manufacturing include Ridley Inc. of Manitoba, Nestlé Purina Petcare of Ontario, Shur-Gain (a member of Maple Leaf Foods) of Ontario and Masterfeeds also of Ontario. Total sales of this sector reach over **$3.5 billion** annually, employing a total of approximately 10,900 Canadians.

3.2 Grain and Oilseed

The grain and oilseed sector is largely a commodity industry with annual sales of **$8 billion** in 2003. The sector employs the fewest people of all food processing sectors in Canada and had the smallest annual payroll at $400 million (2003). According to Statistics Canada, grain and oilseed millers have made substantial improvements in worker productivity with an 8 percent annual increase since 1992. This figure is double that of the manufacturing sector and almost three times the increase of the other sub-sectors of the food processing industry. Appendix 1 provides a brief overview of some of the major grain and oilseed players in Canada.

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10 Establishments – Dog and Cat Food Manufacturing 2003 Industry Canada
11 Employment – Dog and Cat Food Manufacturing 2003 Industry Canada
12 Manufacturing Production – Dog and Cat Food Manufacturing 2003 Industry Canada
14 Info on the Feed Industry, ANAC http://www.anac-anac.ca/anglais/feed/1_pageshtml/feed.html
15 Establishments – Other Animal Food Manufacturing 2003 Industry Canada
3.3 Sugar and Confectionary

The Canadian confectionery industry consists of three segments: chocolate confectionery, sugar, and chewing gum. Consisting of 106 plants and employing 10,411 people, the Canadian confectionery industry is highly concentrated in Ontario (85-90%), with minor representation in the remaining provinces.\(^\text{18}\) Considerable growth in the industry has been observed with total values increasing from $1.4 billion in 1992 to $3 billion in 2002.\(^\text{19}\)

### Chocolate Confectionery

Chocolate confectionery is available in two forms: boxed/novelty chocolate (which is seasonal and bought for special occasions), and bars (which possesses a steady annual purchase pattern).\(^\text{20}\) Due to the seasonality of some equipment, confectionery companies generally operate at 75 percent of production capacity.\(^\text{21}\) To ensure the quality and consistency of confectionery products, a high degree of technological understanding and expertise is required at the plant level.

Businesses focused on chocolate confectionery are usually large in size and dedicated to a smaller line of products.\(^\text{22}\) The chocolate processing industry in Canada is one of the most competitive markets in the world as it is the only nation that is home to the top five multi-national chocolate manufacturers.\(^\text{23}\) Foreign-controlled enterprises located in Canada account for the majority of industry shipments. Many major Canadian companies are recognizable subsidiaries of foreign-based multinationals including Cadbury, Effem Foods (parent is Mars Inc.), Hershey, Nestlé, and Wrigley.\(^\text{24}\) Ferrero Rocher (Italy) is also currently building a plant in Brantford, Ontario.

### Sugar

Sugar confectionery companies are characterized by small or medium-sized organizations producing a wide variety of products, including hard candy, toffee, and liquorice.

### Chewing Gum

There has been increased pressure for innovation in the sugar industry as Canadians seek healthier food alternatives. This had led to new product positioning for chewing gum with pharmaceutical attributes such as teeth whitening and breathe freshening. Another trend within the confectionery industry is the desire for quality confectionary versus large, mass produced quantities (i.e. Laura Secord). This trend is a result of baby boomers that now possess more disposable income and demand higher end food choices.\(^\text{25}\)

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\(^{18}\) The Canadian Confectionery Industry 2004, Agriculture and Agri-Food Canada  
\(^{19}\) Canada’s Confectionery and Chewing Gum Industry Fact Sheet 2003, Agriculture and Agri-Food Canada  
\(^{20}\) Canada’s Confectionery and Chewing Gum Industry Fact Sheet 2003, Agriculture and Agri-Food Canada  
\(^{21}\) The Canadian Confectionery Industry 2004, Agriculture and Agri-Food Canada  
\(^{22}\) The Canadian Confectionery Industry 2004, Agriculture and Agri-Food Canada  
\(^{23}\) Production Efficiencies in Chocolate Processing, OCEAT  
\(^{24}\) http://atn-riae.agr.ca/supply/3298_e.htm  
\(^{25}\) The Canadian Confectionery Industry 2004, Agriculture and Agri-Food Canada
3.4 Fruit and Vegetable

In Canada, the growing season for fresh fruits and vegetables is short, while product demand is year-round. The industry is largely characterized by primary processing activities, and is seasonal in nature due to the Canadian climate. Fruit and vegetable processing attracts less skilled labourers due to the cyclical availability of employment. The fruit and vegetable processing industry accounted for approximately 10 percent of all food industry employment in 2003.

In 2001, the Canadian fruit and vegetable canning, pickling, and drying industry exported $522 million dollars worth of product. There are approximately 15,000 vegetable growers in Canada producing close to 7 million tonnes of vegetables worth $2.4 billion dollars annually. In addition, there are 16,000 fruit growers producing an estimated 677,900 tonnes of fruit, worth about $517 million each year. The majority of fruit production is concentrated in the Southern parts of Ontario, British Columbia and Quebec.

The Canadian fruit and vegetable processing industry is comprised of many small, family-run farming operations and less large multi-nationals, limiting the number of extensive distribution networks. See Appendix 2 for a list of some of the larger fruit and vegetable processors in Canada.

3.5 Dairy

In 2003, the Canadian dairy industry generated sales totalling $11 billion. Together, Ontario and Quebec are responsible for over 75 percent of Canadian dairy production. The top three Canadian dairy processors are Saputo, Agropur and Neilson.

Increased specialization of dairy farms and economies of scale associated with transportation costs have led to consolidation in the dairy processing industry. Since 1975, the number of processing plants in Canada has decreased by 50 percent. Much of the noted consolidation occurred as a result of mergers because retailers were demanding larger shipments. Approximately 15 percent of processors account for 71 percent of total dairy production in Canada.

There were 444 dairy processing plants (288 which are federally inspected) in 2003 employing 26,000 people across the country. Ontario and Quebec possess 60 percent of Canada’s dairy processing plants. Processing plants are usually found on the outskirts of urban centres to ensure fast delivery to consumers. Dairy plants producing products with a longer shelf life (such as butter, milk powders, cheese and whey powders) are located closer to rural areas and the supply of needed raw materials.

26 Canadian Dairy Industry Profile 2004, Agriculture and Agri-Food Canada
27 Canadian Dairy Industry Profile 2004, Agriculture and Agri-Food Canada
28 Canadian Dairy Industry Profile 2004, Agriculture and Agri-Food Canada
29 Canadian Dairy Industry Profile 2004, Agriculture and Agri-Food Canada
3.6 Meat and Poultry

The Canadian meat and poultry industry consists of beef, pork, lamb and poultry (chicken and turkey). Annual shipments in 2002 totalled $14.6 billion in 2002 (pre BSE), making it the most significant sector in Canadian food manufacturing.\(^{30}\) The Canadian meat and poultry industry has the largest number of employees per establishment and accounts for 29 percent of all food industry employment. Meat processors also report the biggest payroll with annual wages and salaries of approximately $2 billion. The meat and poultry industry is dominated by few, large multi-national corporations that control the majority of the market.

**Meat**

Prior to the discovery of a single cow with bovine spongiform encephalopathy (BSE), meat processing led the food industry in exports and accounted for one third of total food exports. Generally a commodity-based industry, emerging markets in Japan, Mexico, South Korea and China, offer new opportunities in the retail, food service, processed beef and beef offal market sectors.

**Poultry**

Poultry production and processing is among the most highly merchandised and effective sectors in Canadian agriculture. In 2003, the Canadian poultry industry produced approximately $1.8 billion worth of products.\(^{31}\) The industry is one of the most advanced processing industries in the country. In fact, Canadian processing plants can slaughter and process 25,000 broiler chickens per hour and one single employee can operate a unit of 50,000 broiler chickens. Please see Appendix 3 for a listing of the largest meat and poultry processors in Canada.

3.7 Fish and Seafood

The seafood industry accounts for 20 percent of total food exports, with over 80 percent of its fish and seafood production sold in more than 130 countries. The commercial fishing industry in Canada is worth more than $5 billion annually and is largely comprised of primary and secondary processing operations. The seafood industry accounts for 15 percent of the total food processing industry workforce in Canada.

The seafood and fishing industry is typically categorized as seasonal, although there is a shift towards extending the operating season to move towards year round operations through capacity costing (see glossary) initiatives. Currently 70 percent of seafood processing workers reside in Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland; 14 percent reside in British Columbia and the remaining 16 percent are distributed in the other provinces and territories. The seasonality of the industry typically attracts less skilled workers who are willing to accept inconsistent employment. The fish processing industry has been greatly affected by a decline in fish stocks and by harvest reductions. Some smaller fish plants have closed because of these changes. Industry sources indicate that there is a trend toward processing fish at bigger canneries at the expense of smaller ones. More cleaning and dressing duties are being performed on fishing vessels, and fish plants have become increasingly mechanized. All of these factors contribute to an increase in mechanization within the industry.

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3.8 Bakery

In 2003, the industry had sales valued at just over $2.9 billion in Canada (excluding frozen baked goods). The bakery industry in Canada has the fewest average employees in food processing per establishment – an average of 17 workers per facility. This is the result of the many small ethnic and specialty bakeries in the industry. Salaries within the bakery industry represent 15 percent of the total food industry payroll at just over $1 billion.

Manufacturing and shipments from the Quebec bread and bakery industry account for 30 percent of the Canadian total. The Quebec industry employs 8,485 people in 434 bread and bakery establishments. In 2003, 88 percent of sliced bread sales to retailers were accounted for by the three major companies operating in Quebec, including Weston Bakeries, Canada Bread Company, and Boulangerie Gadoua Ltd (see Appendix 4 for more information). Private brands account for only 18 percent of bread and bakery sales in Quebec, compared to 30 percent of sales in Ontario and Western Canada. Exports rose 116 percent between 2000 and 2002, due to the emergence of the less perishable par-bake category.

The bakery category is evolving to meet the needs of a changing industry. The sector is segregated by key processes rather than market related categories. These three sub-categories are:

- Batch;
- Process; and
- Par.

**Batch Bakery**

Batch bakery is a generally small scale operation that transforms finished multi-products such as breads, cookies and cakes.

**Process Bakery**

Process bakery involves baking single product offerings on a very large scale and is a category dominated by large multi-level organizations.

**Par Bakery**

Par bakery creates fresh and frozen products in a partially baked format for further preparation at a food service location or customer facility. Par bakery is quickly becoming a staple at the food service level due to many advantages over in-house baking:

- Minimal labour;
- No skilled labour required;
- Eliminates preparation time and labour;
- No waste – make only what is required;
- Just minutes from freezer to table; and
- Fresh-baked aroma.

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32 Retail Sales Data 2002. Agriculture and Agri Food Canada.

33 Agri-Food Trade Services: Market Information Canada, Quebec Bakery Industry Outlook, April 2004
3.9 Other

According to Statistics Canada, the Other Food Manufacturing category is comprised of establishments not classified in any of the other industry groups. Industry players are primarily engaged in manufacturing food in the following categories:

- Snack food manufacturing;
- Roasted nut and peanut butter manufacturing;
- Coffee and tea manufacturing;
- Flavouring syrup and concentrate manufacturing;
- Seasoning and dressing manufacturing; and,
- Other manufacturing.34

**Snack Food**

Manufacturers in the snack food industry are generally involved in the production of potato chips, tortilla chips, pretzels, popcorn and corn and cheese confections. Shipments in the industry were estimated to be $1.5 billion in 2001.35 In 1997, 30 establishments employed roughly 5100 people. The majority of snack food production occurs within Ontario and Quebec, but some large plants are also located in Western Canada and in the East.36

**Roasted Nut & Peanut Butter**

On average, Canadians consume a total of 71 million pounds of peanut butter each year.37 With a total of 44 Canadian establishments, the majority (38.6%) can be found in Ontario.38 One of the leading manufacturers in the sector, Kraft Canada Inc., is located in Toronto, Ontario.39

**Coffee & Tea**

The Canadian climate is not suitable for the growth of tea and coffee, yet raw materials are imported for processing. Sales growth in the Canadian tea industry is primarily due to an increased interest in the health benefits of tea, and the wide variety of flavours offered to consumers at reasonable prices. Total manufacturing shipments for tea and coffee combined equalled $1.1 billion (representing 1.9% of Canadian food and beverage shipments). The industry is made up of 41 plants, employing 2,617 employees in Ontario, Quebec and British Columbia.40

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35 Ontario Ministry of Agriculture, Food and Rural Affairs, Cost Efficiencies in Snack Food Processing, September 2004
36 Agriculture and Agri-Food Canada, The Canadian Snack Food Industry Sub-Sector Profile
37 Kraft Canada – Peanut Butter - Spread the Nutrition
38 Canadian Industry Statistics Establishments Roasted Nut and Peanut Butter Manufacturing (NAICS 311911)
39 All About Kraft
40 Agriculture and Agri-Food Canada, The Canadian Tea & Coffee Industry Sub-Sector Profile
**Flavouring Syrup & Concentrate**
This industry is responsible for the production of soft drink concentrates and syrups intended for use in soda fountains and soft drink making.41

**All Other Food**
All other food manufacturing, not mentioned within another category, is classified in this sector. This sector includes perishable prepared food items such as fresh pizzas, salads, cut vegetables and other similar items.42

For an overview of food processing industries by region, please see Appendix 5.

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41 Statistics Canada, Special Aggregation: Goods and Services, 2005
42 Statistics Canada, Special Aggregation: Goods and Services, 2005
4.0 Categories

It is important to segregate food processing industries (see Appendix 6 for a description of the various levels of food processing) due to the different environments that affect human resources. For example, primary processing is generally characterized by less desirable working conditions, while further processing facilities are heavily dependant on technology and product development.

Furthermore, it is important to segregate food processors into the categories in which they compete. Categories more accurately identify the products that define the industry, rather than the commodity sectors. The analysis provided in the previous sections, offers a snapshot of the diverse range of industries that exist within the broad food processing sector in Canada; however the vast majority of industry players categorize their products by processes and business units. Thus, human resources must be capable of meeting the demands of the industry, as well as those demanded by individual product categories.

Within the food processing industry, things such as process design, packaging, HACCP, category management, and customer segmentation have developed around products categorized by processes and business units. The proceeding category breakdown defines the food processing industries into actual processed products (derived from AC Nielsen research categories) rather than the sub-commodity group from which they stem:

- Bakery;
- Dairy;
- Fresh – Deli;
- Ready to Serve (RTS);
- Grocery;
- Confectionary;
- Condiments and Sauces; and
- Entrée.

Appendix 7 provides more detailed information regarding the food processing industry categories.
5.0 Consumer Trends

The food processing sector is highly competitive. The ability to meet the needs of both consumers and customers is paramount to maintaining and gaining market share. Most food processors consider product development very important and new products have been proven to drive brand growth.43

Consumers today are faced with an unparalleled amount of food choice. Evolving lifestyles and sophisticated purchasing motivators have forced food manufacturers to consistently offer new and innovative food products. Several trends are becoming increasingly important to consumers, and as a result food processors must take notice. The following outlines some of the major consumer trends that are impacting the way that consumers eat:

- Health;
- Convenience;
- Organic and Natural;
- Speed Scratch;
- Ingredient;
- Microwave;
- Frozen;
- Fresh/Traditional;
- Functional Foods and Nutraceuticals; and,
- Multicultural Cuisine

Appendix 8 provides a detailed profile of consumer trends that are affecting the food processing industry.

6.0 Customer Trends

As with any industry, food processors must address the needs of their customers in order to be listed within their stores or operations. Customers differ from consumers as they are the main vehicle to sell food (i.e. retail grocery stores and food service operations).

Each customer has a unique set of needs in terms of distribution, packaging, pricing and product performance which are changing drastically in today’s ultra-competitive environment.

The following identifies some major trends and factors that are affecting the food processing sectors including the impact of globalization as the scope of the customer base widens to international opportunities:

• Customer Consolidation
• Shelf Life
• Warehouse
• Buyer Groups
• Multi Programs
• Product Launches
• Globalization

Appendix 9 provides a detailed review of each of the above mentioned customer trends and how they are impacting the food processors.
7.0 Facility Considerations

Evolving consumer and customer trends directly affect the facilities, processes and occupations within the food processing industry. Highlighted below are just a few of the facility variables that are affected by the evolving demands of today’s new environment:

- Reduced product runs;
- Increased variability of products and costing standards;
- High labour costs;
- HACCP standards;
- Multicultural labour force;
- Facility Standards;
- Packaging Needs;
- Storage and Distribution; and,
- Workforce management.

Appendix 10 reviews the above facility considerations in detail.

SUMMARY - Part I

The information presented in Part I provides a broad overview of the food processing industry, the categories in which it competes, and the factors influencing operational aspects due to customer and consumer needs. Factors such as globalization, consolidation and increased technology use are beginning to characterize the food processing environment.

The impact of customer consolidation and globalization are increasing the need to improve efficiencies in order to compete. Issues relating to the need to address food safety, regulatory and legislative requirements all impact the ability make efficiency changes. At the same time, the need to respond to consumer needs with innovative products adds to the complexity of production.

Consumers and customers are demanding more sophistication than ever before. Food safety, quality, and innovation are now industry norms that must be accommodated by food processors, their facilities, and their people. No matter what food processing industry, they are experiencing tremendous change and new demands.

The importance of the food processing sector in terms of size and revenues emphasizes its importance as an industry in Canada. Profitability is directly related to the ability of the food processors to reduce costs of production as well as increase market share through new and innovative products. Part II of this report explores the impact of human resources on reducing costs, increasing efficiencies, and meeting the needs of a new realm of industry realities.
PART II

Photo: Comité sectoriel de main-d’œuvre en transformation alimentaire
8.0 Industrial Realities

8.1 Food Processor Interviews

Methodology
A variety of industry stakeholders were consulted in order to assess the challenges of processors first hand. The interviewees were selected based on a balanced sample of small, medium and large food processors from diverse sectors across the country as well as labour representatives and food centre coordinators. Due to reasons of confidentiality, the names of both the interviewees and the companies contacted have been omitted. Please see Appendix 11 for a list of the demographics of the companies interviewed.

The ultimate focus of the discussion document was to understand human resource and skills development issues. In addition, in order to provide a greater understanding of external issues that affect food processors, the first half of the interview was spent on discussing issues including domestic and global competition, consolidation of the retail and food service sectors, and specific measures taken to manage competition such as new product development and efficiency improvement mechanisms.

The latter part of the interview addressed labour and skills development issues more specifically to gain an understanding of the areas of challenge regarding human resources. The information gathered throughout the interviews is reported in the following section to highlight some of the more pressing industry realities. Please see Appendix 12 for the Interview Discussion Document.

8.2 Industry Realities

Consolidation – the Big are Getting Bigger

Statistics Canada defines industry concentration on the processor side by the market shares of some or all of the firms in a particular market. The total number of firms is important, but so is the degree of influence or power a particular firm holds. Market concentration has demanded greater efficiencies at all levels of the supply chain. Retail mergers and acquisitions are leading food industry consolidation.

The number of national retail banners in Canada is minimal. Two of the largest retailers in Canada (National Grocers and Sobey’s) have a number of retail formats ranging from high-end to price-focused. Through a variety of store mediums, these two giants control a large portion of the $37.8 billion retail market. The recent acquisition of A&P by Metro further reduces the number of national players.

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44 Statistics Canada – Catalogue no. 21-601-MIE

44 Statistics Canada – Catalogue no. 21-601-MIE
Retail consolidation has largely influenced the food processing industry. As the retail buyer becomes larger, they look towards food processors that can accommodate larger volume needs as well as ones that have federal inspection to fill orders nationally. The larger volumes demanded by retail conglomerates come with a price of reduced margins for the food processors. As well, distribution has switched from smaller distribution centres to larger retail warehouses with higher warehouse allowance fees. All of these factors contribute to increased costs to the processors.

Medium sized processors have begun to merge and larger food processors are becoming multinational operations. This has put considerable pressure on “land based” Canadian food processing firms. That is, companies that rely on Canadian business and have not expanded into the international market. Multinational processors have the ability to look at other marketplaces for marketing trends and opportunities that can provide better margins; however land based processors do not have this luxury and remain affected by increasing costs of production.

Consolidation has forced processors to continuously strive for efficiency, even on large volume processing. Lean manufacturing encompasses not only efficiencies in production, but streamlining processing lines as well. In addition, consolidation has resulted in reduced skus in the marketplace. The evolution of private label has opened up choices for consumers without increasing the number of processors.

While it would appear that only the larger processors could survive in this type of environment, retailers also recognize that it is difficult for the larger processors to offer specialized niche products. For a large processor that counts on volume in order to make margins, each line change and product variation means time and money are jeopardized. This has led to an opportunity for small and medium-sized processors to offer increasingly customized products with purchasing flexibility and diversified risk in terms of suppliers.

**STAKEHOLDER INPUT**

- “Retailers don’t necessarily want to put their eggs in one basket in terms of supply so they may hedge their purchasing with a few other smaller processors. The consolidation at retail is very much driving the private label development and retailers are grabbing national market share. This has resulted in very competitive quotes for business as some people will work just to cover overhead costs. It may be that in the next few years, this trend will not be profitable and processors will have to consider other strategies to use up their excess capacity – or demand may be high enough for their own line of products.”

- “The consolidation at retail is a major concern. We are a medium sized bakery so if a larger customer comes to us with a huge volume order this is great for business but there is some risk. If we take them on and lose other business because they take up all of our capacity, we are at risk if we lose them. For a company our size, one order from a large player could take up all our capacity. If we lose them, we are in trouble – especially if they start putting the squeeze on us to reduce costs.”

- “The consolidation of the processing industry itself has drastically affected training facilities and educational institutions. As the larger processors grow through acquisitions, as do their resources to train internally. For example, Cargill has its own training programs for meat processing and butchery. And the small and medium sized processors are just struggling to meet daily needs and requirements and cannot afford to think long-term.”
• “Consolidation has led to greater competition and private label products have put the squeeze on pricing in many of the categories we compete in.”

Needs

• Fully understand the needs and strategies of retailers
• Approach training needs with a strategic focus so skills sets are matched with the realities of the retail and food service industries

Cost Reduction and Improved Efficiencies

Plant logistics have changed drastically in the past ten years. Larger companies strive to create production efficiencies due to larger volume throughput through streamlining and increased capacity. In the past, batch runs in the form of private label products helped with capacity although these runs were typically sold at reduced margins. The intention was to increase facility capacity to decrease overhead and fixed costs, rather than to make a profit on these batch runs.

The popularity of private label products in Canada has resulted in massive product lines devoted solely to the category. Instead of being used to top up facility capacity, private label runs were now in need of complete production lines. As the private label category becomes a larger percentage of the food processing industry, it is becoming increasingly difficult to keep production efficiencies competitive. Food processors are in need of industrial engineers and cost accountants in order to cost benefit the potential of these production lines.

As the industry shifts from long production runs with many distribution outlets to smaller runs with fewer outlets, the need to evaluate distribution costs becomes critical. Throughout the country, food processors must develop transportation efficiencies especially in Atlantic Canada (Newfoundland-Labrador, Nova Scotia, New Brunswick, and Prince Edward Island) and Western Canada (Manitoba, Saskatchewan, Alberta and British Columbia). Shipping to Central Canada, the country’s largest population centre, is becoming increasingly costly as fuel prices continue to rise.

STAKEHOLDER INPUT

• “Customers view rising gas, insurance and tax rates as costs of doing business so we must absorb these costs and increase efficiencies by increasing production as a matter of survival. Cost reduction is a high priority in the Canadian food industry due to low pricing demands by customers. Line configuration and the use of technology help make the plant more efficient and profitable. The future of profitable food processing lies in lean manufacturing.”

• “We are always trying to be innovative and much of the innovation has come from me as an owner looking at ways to increase capacity – what else can we do with the existing equipment to utilize what we have? We have tried different products as well as different equipment configurations to do this.”

• “Yes, we are having to lean down considerably and are going through a whole restructuring with voluntary severance packages. In terms of increasing competitiveness, we are always trying to improve with technology and looking for ways to be more efficient with our sales force. For example, we have them doing handheld ordering allowing for better inventory control.”
Needs

- Design a program that focuses on improving plant efficiency, plant costing and use activity based costing measures
- Develop innovation around production for more efficient design

Increased Technology and Automation

The use of increased technology, whether it be new processing or packaging equipment, is an important strategy for processors looking to increase production efficiencies. The number of technologies used by a plant is found to be highly correlated with expected gains in firm performance according to studies executed by Statistics Canada.45

Stringent controls and the use of technology have helped improve food processing production aspects such as shelf life. The ability to extend the shelf life of a product has considerable advantages for the food processor. This lengthens the critical path for the product in terms of distribution, allowing the product to be merchandized for a longer period of time at the retail level and may reduce the amount of the product with expired code dates. For example, technology such as modified atmosphere packaging (MAP) techniques can extend the shelf life of food products considerably; however, this technology needs to be applied with precision. The industry’s workforce needs to understand how the physiology of the fresh product is affected by the modified atmosphere in order to appreciate the need for strict controls.

Not only does the implementation of new technologies require additional software, but a skilled workforce to operate it. According to Statistics Canada, “Firms that lack adequate training strategies are at a disadvantage and tend to adopt fewer advanced technologies.”46 Additionally, training and software costs can also act as a barrier to adoption.

In addition, the same study by Statistics Canada suggests that skills shortages invariably exist in an industry that is implementing new technology; but only becomes a problem when companies fail to adopt a training strategy to overcome them. Automation would allow for a smaller-scale workforce, yet the level of skill would need to increase over that of current food processing workers. Increased automation could also reduce the dramatic fluctuations in seasonal industries.

STAKEHOLDER INPUT

- “Technology has been required to increase throughputs, reduce energy costs, insurance and taxes. As technology has increased, the skill level of the individuals that are operating the equipment need to be more skilled, more aware, and more technicians than frontline workers are needed than in the past.”

- “We have the product expertise, but need to train our employees on the technology side. We are sending people to be extensively trained on equipment and then they come back and train others.”

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• “The greatest technological innovation by far has been in packaging equipment. This relies largely on technology advancement that only the very large processors can afford.”

• “Yes, even though we are a larger manufacturer, we still have to be competitive. We are able to acquire and own quite a bit of new technology in the various plants that we own. In fact, we need to better understand all that is available and incorporate it better. We have found it difficult to understand the real costs of some of the processes that we conduct as well as ways to understand some of the costs of labour and yields. I have found it difficult to source experienced product development people and in-plant knowledge to help improve our efficiency.”

• “Generally, the food industry is not as technology driven as other industries. The sector as a whole needs to have a way to assess current technology and know how to find technology to make themselves more competitive. Additionally, larger firms tend to utilize technology more so than small and medium sized enterprises.”

Table 8.1 – Use of At Least One Advanced Technology by Firm Size

<table>
<thead>
<tr>
<th>Advanced Technology Use</th>
<th>Plant Size</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small</td>
<td>Medium</td>
</tr>
<tr>
<td>Overall – percentage of establishments</td>
<td>86</td>
<td>91</td>
</tr>
<tr>
<td>Functional technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Processing</td>
<td>58</td>
<td>61</td>
</tr>
<tr>
<td>• Process Control</td>
<td>47</td>
<td>74</td>
</tr>
<tr>
<td>• Quality Control</td>
<td>37</td>
<td>57</td>
</tr>
<tr>
<td>• Communications</td>
<td>54</td>
<td>78</td>
</tr>
<tr>
<td>• Pre-processing</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td>• Packaging</td>
<td>43</td>
<td>66</td>
</tr>
<tr>
<td>• Design and Engineering</td>
<td>11</td>
<td>30</td>
</tr>
</tbody>
</table>

Needs

• Understand major technology advancements and implementation into the industry
• Provide workshops in technology
• Work with suppliers to develop programs that may assist small and medium sized firms in adopting more technology

Product Development

Changes in consumer preferences and demographics have put pressure on food processors to address the evolving specifications of new products and categories. For example, we are seeing an increase in value added products at retail due to the demands of consumers’ busy lifestyles.

A reduction in available labour, especially skilled labour, at the food service level has demanded more convenient items in that sector as well. That is, without preparation knowledge, food service operations require food items that are pre-portioned and can be easily prepared with little labour.

Product development will be required to address changing consumer trends such as health and convenience. New product development is both risky and costly. Industry statistics identify that 95% of new products fail; therefore, a considerable amount of development is needed for a very small percentage of products that will actually be launched. Not only is success narrow, innovation and marketing involves developing, researching and launching products which is a very expensive proposition. This initial capital investment has made Canada a conservative product follower rather than a product leader when compared to other markets such as the U.S. and the European Union. If the “one in ten” rule is applied to Canada and the U.S., the U.S.’s larger processing capacity and larger domestic market, helps absorb product development and launch costs.

STAKEHOLDER INPUT

- “There is a need to create new products but R&D people are hard to find, particularly within the food industry.”

Table 8.2 Persons Engaged in Research and Development, Canada (1998-2000)⁴⁸

<table>
<thead>
<tr>
<th>Sector</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Industry</td>
<td>800</td>
<td>832</td>
<td>770</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>45,289</td>
<td>45,706</td>
<td>55,901</td>
</tr>
<tr>
<td>All Industries</td>
<td>76,493</td>
<td>80,506</td>
<td>92,281</td>
</tr>
</tbody>
</table>

Needs

- Offer information on product opportunities for each sector
- Conduct strategic new product analysis by sector and prepare recommendations for new products opportunities
- Recruitment and training for Research & Development (R&D) personnel

Regulatory Change and Quality Assurance

Food safety should be identified as a plant program, such as HACCP, that is put into place to ensure food is safe, whereas quality assurance focuses on product controls that ensure quality for brand/product integrity. The benefits of enhanced food safety and quality, as well as productivity improvements, are closely associated with technology use.⁴⁹

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Quality assurance and food safety programs have become the norm across the food processing industry. New regulations and standards have impacted facility processes, the products produced, and the workforce producing them. The systems to improve safety and quality are diverse and numerous, labeled with a variety of terms and acronyms including TQM (Total Quality Management), GMP (Good Manufacturing Practices), HACCP (Hazard Analysis of Critical Control Points) and ISO 9000 and 14000.

HACCP is widely acknowledged as synonymous with food safety in the world of processing. Implementing, achieving recognition or certification of, and maintaining a HACCP system is increasingly becoming a requirement for food processors of all types and sizes. In Canada, HACCP recognition is now mandatory for all federally registered facilities. Generally, most major retail chains only accept higher risk products (such as meat and meat products) from federal, HACCP-recognized facilities, or from facilities with recognized HACCP systems. HACCP will continue to be required around the world through legislation and regulation, as well as from retail, distributor, food service, and consumer pressure.

The new realities of HACCP-based processing, causes potential problems with respect to product flow and efficiency. In the past, food processing plants and production lines would move in relation to cost efficiencies. Today, food safety including the principles of HACCP must be considered above process efficiencies.

While BSE in beef and Avian Flu in poultry is a supply related issue regarding disease control, it has become a food safety issue with respect to how it is communicated to consumers. Consumers rank food safety as their number one concern regarding food buying. Food processors are highly impacted by this grower-related issue and have had to respond with tighter controls as a result. Not only has the access to supply and customers been disrupted, the cost of administrative aspects put forward by legislation has increased the workload of processors substantially.

There is also heightened awareness to address the entire food system including risk management strategies for disease control, emergency preparedness and biosecurity throughout the supply chain linked with traceability systems. Environmental practices as well as social responsibility are also becoming increasingly important to consumers as well as governing bodies.

Regarding trade legislation, there is a general feeling that trade is being impeded by less than equal requirements on behalf of the trading partners. Firstly, it should be stated that there is agreement in the food processing sector that the government needs to remain thorough, especially with the recent food disease incidents that have taken place. Concerns arise when there are roadblocks presented that make trade difficult.

Implementing an international set of trade guidelines would be most helpful for all food processors. In stating that, it is recognized that the regulatory differences among Canada and the U.S. reflect consumer values. Agreement on common issues, such as supporting a single food safety system, would help equalize some trade issues. Other issues such as packaging and labelling standards make it very difficult (and expensive) to sell oversupply into a different marketplace due to different regulations and standards.

50 Food in Canada 2005: KPMG Executive Roundtable, Food in Canada, September 2005, pg 26
STAKEHOLDER INPUT

• “New food safety regulations set forth by the CFIA after BSE have greatly increased the amount of paperwork required to process orders going across the border – so much so that they have had to hire someone to coordinate orders and shipments and ensure that all of the documentation is in place. A smaller organization may find this very cost prohibitive.”

• “One baked goods processor was involved in the AIB (American Institute of Bakers – which is like a HACCP for the bakery industry and set standards of practice). This, as well as HACCP, has affected the bottom line in terms of costs but in the end we have seen some processing efficiencies.”

• “Other food processors found that increased regulations among destination export countries have placed added pressure on processors - when dealing with the U.S., it is difficult to keep up-to-date as some products come under the FDA and some under the USDA.”

Needs

• Offer workshops in quality assurance, food safety, regulatory changes, labelling, etc.
• Offer advice in dealing with food borne diseases as well as animal related diseases
• Templates and information regarding HACCP and other food safety standards
• Harmonized guidelines for HACCP coordinators and quality assurance/insurance inspectors

Globalization

The introductions of the World Trade Organization (WTO), the Canada-United States Trade Agreement (CUSTA), and the North American Free Trade Agreement (NAFTA) have increased the opportunity for Canadian food processors looking to export. This increase in global markets means increased global competition which requires a commitment to technology, research and development, cost reduction, and efficiency.

International trade not only allows for increased access to foreign markets, but also has a strong impact on those at home. Domestic producers must place emphasis on efficiency and production technology in order to maintain their competitiveness with foreign imports. The influx of foreign products has made the Canadian market reassess its production, quality, food safety and marketing efforts in order to better compete on a global market.

New product categories such as natural foods, organics and nutraceuticals/functional foods have created an entirely new arena of regulations that possess challenges for processors. Organic regulations in particular differ greatly from country to country, and Canada has yet to adopt one uniform standard for the emerging category.

The Canadian dollar is a concern regarding global opportunities. Some food processing sectors, in particular beef, are very sensitive to the rising dollar and further processors will not pay more money for Canadian products. Unless there is a unique point of difference that can be marketed, it is unlikely that they will pay more for an input product that they can get cheaper somewhere else.

While the strength of the Canadian dollar can make importing raw ingredients more affordable, it also makes exporting products less attractive. One of the only ways to compete against the lack of stability in the dollar when it comes to lower priced competitors is to have strong brand differentiation and excellent support services such as sales and distribution.
The competitive global marketplace puts further pressure on land based processors as they cannot manage the fluctuation of the dollar in the same way multinationals can. Global players can look to other markets to balance out discrepancies and “wait out” higher and lower trends of the dollar. A recent article in Food In Canada (September 2005) identified that capital investment is on the rise; however partly due to the stabilization of the Canadian dollar, as well as the need to substitute capital for labour if Canadian processors are to remain competitive in export markets and due to increased import competition. Companies are looking to technology to increase labour productivity, in particular, equipment designed for ease of cleaning in order to address rising sanitation standards and stricter inspection.

The impact of the Canadian dollar has had other implications in terms of competitiveness. For example, Canadian companies co-packing products for the U.S. are particularly hard hit to see profitable results. Improved efficiencies are being realized by focusing on core business competencies, mergers and consolidation of capacity. As well, innovation is playing a role in providing new products that deliver profits to grocers.

**STAKEHOLDER INPUT**

- “The increased strength of the Canadian dollar has made it less competitive for other countries to do business here. For example, a deal with China fell through as newly released currency rates made the deal uneconomical.”

- “Some of the commodity products and crops Canada produces are shipped offshore for processing. Canada has an opportunity to take some of the market share back from countries that are supplying niche markets by consolidating some of the smaller processors and keeping the commodity products here. For example, peas from Canada are shipped to the Middle East for canning and then come back to Canada to be sold at retail.”

- “From a regulatory side, the border closure of commodity beef was very difficult on meat processors. All protein markets were subsequently affected. When the borders shut down, it impacts commodity pricing and makes it very difficult to absorb these increases, especially when they impact many markets at the same time.”

- “Globalization increases the need for proper food safety due to food disease related threats (i.e. Avian flu). This affects us greatly when we lose access to a country or supply is lost due to border closures. There have been problems with Avian flu in poultry so we have increased our bio-security in order to protect ourselves as well as our customers.”

- “Furthermore, access to the larger U.S. market is attractive to gain larger accounts; however, some processors end up having difficulties responding to that volume. There are some lines that lend itself to greater automation while others are more labour intensive – that can make it difficult to compete – especially with the strength of the Canadian dollar.”

- “The discovery of BSE in 2003 drastically altered the Meat Processing Certificate’s program curriculum at Olds College. The course is now very focused on proper food safety techniques including HACCP standards. Olds College makes sure to consult industry (generally through informal telephone and in-person interviews) to see where the industry is evolving and how human resource needs must change accordingly.”
• "The Costco’s and Wal-Mart’s are driving down prices and we have to be efficient to compete. As well, there are some ingredients that are illegal in Canada so even a very successful product in the U.S. cannot be brought here. We have tried to change the formulation but the product is not the same."

Needs:
• Understand the diverse regulations and legislations that govern export markets
• Understand in-plant efficiencies and the impact of the related food chain
• Understand vertical coordination and vertical integration by sector

Consumer Trends

There are several growth opportunities available to food processors. Although some of these trends and categories are in growth mode, it is important to distinguish between a market trend and a real opportunity in relation to a particular company – this will depend on available resources, expertise and distribution capabilities. There are several key trends and categories that may present strategic opportunities to some Canadian processors. A sample is provided below:

Table 8.3 – Consumer Trends and High Growth Food Categories

<table>
<thead>
<tr>
<th>Trends:</th>
<th>Category Opportunities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Bakery</td>
</tr>
<tr>
<td>Convenience</td>
<td>Dairy</td>
</tr>
<tr>
<td>Organic and Natural</td>
<td>Fresh – Deli</td>
</tr>
<tr>
<td>Speed Scratch</td>
<td>Ready to Serve (RTS)</td>
</tr>
<tr>
<td>Ingredient</td>
<td>Grocery</td>
</tr>
<tr>
<td>Microwave</td>
<td>Confectionary</td>
</tr>
<tr>
<td>Frozen</td>
<td>Condiments and Sauces</td>
</tr>
<tr>
<td>Fresh/Traditional</td>
<td>Entrée</td>
</tr>
<tr>
<td>Functional Foods and Nutraceuticals</td>
<td></td>
</tr>
<tr>
<td>Ethnic</td>
<td></td>
</tr>
</tbody>
</table>

A recent roundtable discussion of key food and beverage executives identified that healthier eating was a main consideration for their product development initiatives:51

“This trend will come from innovation and marketing products that are nutritious, good tasting and affordable as the key consumer drivers.”

Convenience was also a key driver for consumers:

“Cooking is a chore. If there are easy, healthy alternatives to traditional meals, we want to be meeting those needs.”

51 Food in Canada 2005: KPMG Executive Round Table, Food in Canada, September 2005, pg 31
Some of the industry challenges include the impact of formulation changes that are made to products as processors are striving to improve their nutritional content. In some cases, a small change can have major repercussions to the formulation and ultimate taste, shelf life, and other characteristics of the product. Skilled product development is required in order to compete with consumer trends that demand more sophisticated reformulation and product innovation.

**STAKEHOLDER INPUT**

- “We see growth in refrigerated foods category which is less forgiving than the frozen food category. Our workers need to be more skilled, more diligent and more conscientious with regards to food safety in perishable food items. This will be a difficult area to move into without considerable protocols and training of the staff.”

- “A new market trend in Europe that is catching on is defining target markets in greater detail than what has been done in the past. For example, identifying particular nutrient requirements for people at various stages in their lifecycle and developing related functional foods to meet the market’s demand.”

- “We see tremendous growth in the appetizer category.”

- “The greatest growth in the poultry area is in fully cooked products. We are in this category now but with the expected growth, we will have to look at investment to expand production and further processing depending on the ROI.”

- “Value added seafood has potential but the problem is that the seafood business is not structured in terms of specifications for raw materials. We end up returning more products than we except. We are trying to create value added products using lower cost alternatives. We need exact specifications on the processing side and find it difficult to source this.”

- “One of the biggest growth areas is healthful products. For us, it is reformulating to accommodate more whole grains, low fat, high fibre, and cholesterol free. More R&D and formulation changes are required in this area which translates into labour and skills development.”

- “The biggest driver to innovation is healthful products. These products require technical formulation expertise to address new ingredient design to lower fat, and reduce or eliminate trans fats. This technical food knowledge is very difficult to source and is usually inaccessible to smaller processors. Processors are relying more and more on their suppliers for innovation. That is, spice companies to offer more healthful ingredients and unique flavours as well as equipment companies to be innovative and help them improve production issues.”

- “We are very innovative and are always trying to produce new products. We are always trying to be more effective as well and look for new ways to produce products that eliminate the potential for hazard and improve safety, reduces waste, etc.”

- “Better-for-you products and health oriented brands. The challenge in the better-for-you products is making them taste as good as their “regular” counterparts. May require more work with process, product design, flow, packaging, etc.”
Needs:
- Information on category trends
- Tools that assist in differentiating a consumer trend from a market opportunity
- Ability to access a website for information on consumer trends and consumer research
- Research and development training programs as well as new product development courses

Occupational Profiles

Nearly half of all workers in the food processing industry are in occupations that are common to all manufacturing. As the food processing industry becomes an increasingly complex environment, managing the industry’s workforce becomes more of a challenge. Increased skills requirements for workers in most sectors will change how work is completed. More training courses will need to be completed, more documents and regulations will need to be followed, and more communication will need to be facilitated. Provided in Appendix 13 is a brief description typical positions within the food processing industry.

The recent increase in industry technology has created a need for higher skilled labour, particularly in skilled trades such as electricians, mechanics, machinists and more technically oriented supervisory level employees. The challenge often sited is the higher salaries commanded by the skilled trades and their ability to find work in other industries, some with better work conditions.

STAKEHOLDER INPUT
- “It is very difficult to find qualified culinary people. Often they come out of school with some food technology training but very few have the ability to apply to or work in a plant setting. If we have unskilled people to operate, we lose our efficiency levels as our number of meals per hour produced goes down.”

- “The following positions are in very high demand: technicians, high-tech machine operators (including maintenance), and quality assurance inspectors.”

- “It is extremely difficult to source R&D specialization in the food industry. We rely on our customers and suppliers to reduce the need for this type of person but to stay competitive; it would be helpful to be able to source this expertise.”

- “R&D people are difficult to find and finding people with plant experience is extremely difficult. We take junior people with science background and teach them how to make the products so they are practical for in-plant production.”

- “We find it very difficult to find R&D and all levels of skills in Q&A, meat cutting, meat science, etc.”

- “Due to the cold, damp environment in which we operate, R&D, maintenance, electricians and quality assurance are all difficult skills to source.”

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52 Workforce Ahead Summary - A Labour Study of Ontario’s Food Processing Industry.
• “The Saskatchewan Food Centre has developed a HACCP technician program that is offered for those that do not necessarily have a college (post secondary) education to meet the need for HACCP coordinators in the industry. This is more of an administrative role with specialized training that is less costly than having several fully trained quality assurance people but can help with the maintenance of the program.”

• “Electricians tend to be very difficult to source and their pay scale is very high.”

• “Very difficult to find electricians. I think the government should invest in more apprentice type training for this trade – not just for food processing but for other industries as well.”

• “Information workers – expertise marketing – brand marketers – it is difficult to find that combination. We have not had a difficulty securing a sales force in Canada.”

Needs
• Conduct a study to determine general and skilled labour needs focusing on specific areas (i.e. maintenance, online supervisors, R&D, HACCP, electricians, etc.)
• Set standards for each occupational profile
• Workshops for key people on the line including communication, process efficiency, and understanding how to make minor line adjustments
9.0 Human Resource Needs and Challenges

Based on the evolving industry realities that characterize the food processing sector today, human resource needs and challenges are explored in detail below:

9.1 Essential Skills

According to the HRSDC (formerly HRDC), essential skills are skills that enable workers to perform occupational tasks, learn new skills and adjust to workforce change. Essential skills include literacy, writing, oral communication, problem-solving, and basic computer use.

An immigrant workforce often means that English as a Second Language (ESL) is an issue that requires that training documentation and other communication material must be available in other languages or written in simple English. It can be challenging for food processors to develop integrated training resources suitable for workers with ESL. As well, there is a need for a certain level of communication in order to ensure understanding of important aspects of the job such as food safety training.

According to one human resource manager cited in the Essential Skills Needs Assessment for Alberta’s Food Processing Industry, “Workers were labourers, now they are semi-skilled technicians”. As technology becomes more sophisticated, the need for workers with an educational background is anticipated to increase. According to the Labour Study of Ontario’s Food Processing Industry, the industry’s workforce is generally less-educated than the general labour force. In fact, nearly 27% of domestically-born workers and 36% of immigrant workers have less than a high school education.

Regarding differing needs across Canada in terms of the general labour force, there are wide ranging and complex issues that are very regional in nature. For example, Western Canada has issues with competition for wages from higher paying industries such as the oil and construction industries. While Eastern Canada has more access to general labour, they have identified that this is an aging population and must begin to think of contingency plans and have been trying to increase immigration to help fill the eventual and current needs for front line workers.

STAKEHOLDER INPUT

• “Skilled labour is so much in demand that even people with minimal academic and practical training are being sought after – especially with respect to regulatory training.”

• “This is very difficult as you have to realize that when employing immigrants, there are some regions that do not get along (i.e. some areas within Asia). We need a level of understanding, regarding English, in order to orientate them and for understanding food safety. We also need to perform better screening.”

• “Usually can get through this with peer to peer training and we are doing more one on one training which we think will help ensure communication and knowledge transfer. For language issues, we can usually find someone in the plant that can translate.”
• “We have a formal orientation program that requires a certain level of understanding in terms of language. Once the orientation is completed, there is a questionnaire and if there is any disconnect regarding the information then they re-train on those areas. Must ensure that there is enough understanding of the language to uphold health and safety standards as well as GMP’s (good manufacturing practices).”

• “New Canadians also present training challenges to the food processing industry as they tend to fill many of the positions in selected locations. A new set of training needs are subsequently presented and communication tools focusing on essential skills must be developed. Again, this would likely best be developed for the industry as a whole.”

• “It comes back to training standards. HACCP is becoming the norm and yet there are no national standards for a HACCP coordinator.”

Needs
• Identify recruitment and orientation challenges by sector and region
• Work with industry to determine essential skill needs regarding hiring and training
• Liaise with government regarding training offered to immigrants
• Assistance with materials written specifically for ESL (English as a Second Language) workers

9.2 Role of Immigration

The food processing labour pool in Canada is increasingly sourced by new Canadians. In fact, in some regions and sectors, immigrants account for nearly 100% of new hires.53

Table 9.1 - Immigrants in the Labour Force, 200154

<table>
<thead>
<tr>
<th>Total labour force</th>
<th>All immigrants</th>
<th>Immigrants who arrived 1991-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Number</td>
</tr>
<tr>
<td>Canada</td>
<td>15,872,070</td>
<td>3,150,765</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Provinces and territories</th>
<th>Number</th>
<th>Number</th>
<th>%</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland and Labrador</td>
<td>241,500</td>
<td>4,590</td>
<td>1.9</td>
<td>945</td>
<td>0.4</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>73,635</td>
<td>2,235</td>
<td>3.0</td>
<td>350</td>
<td>0.5</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>451,375</td>
<td>22,010</td>
<td>4.9</td>
<td>4,770</td>
<td>1.1</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>371,805</td>
<td>12,785</td>
<td>3.4</td>
<td>2,160</td>
<td>0.6</td>
</tr>
<tr>
<td>Quebec</td>
<td>3,742,485</td>
<td>393,570</td>
<td>10.5</td>
<td>124,935</td>
<td>3.3</td>
</tr>
<tr>
<td>Ontario</td>
<td>6,086,820</td>
<td>1,772,505</td>
<td>29.1</td>
<td>557,935</td>
<td>9.2</td>
</tr>
<tr>
<td>Manitoba</td>
<td>585,425</td>
<td>79,885</td>
<td>13.6</td>
<td>18,010</td>
<td>3.1</td>
</tr>
</tbody>
</table>

53 Ontario Labour Study
The majority (57%) of new foreign-born workers who arrived in the 1990s went to Ontario’s labour market. They represented the major part of the growth in the province’s labour force during the decade. In distant second place was British Columbia, where 186,360 immigrants who arrived in the 1990s were in the labour force in 2001. They represented about 60% of the growth in British Columbia’s labour force during the 1990s.

As mentioned previously, this can present challenges for training and orientation programs geared towards new Canadians. Noteworthy too is that companies that hire a large number of new immigrants generally have high turnover rates because the immigrants they hire are over-qualified.

Basic communication on the floor will be imperative, placing new demands on the facility foreman and other plant management. Supervisors, managers and floor workers may come from different cultures. In addition, English may not be the first language of some. In addition, the multi-cultural environment has other considerations requiring the need to expose management to be sensitive to managing diversity and cross-cultural communication. This requires exploring and understanding other related norms that were not issues 20 years ago such as sanitation and hygiene practices which vary among cultures.

Research shows that there is a strong correlation between below-average pay and benefits in the food processing sector relative to other manufacturing sectors with a high dependence on immigrant workers. Baking, sugar and confectionary, meat, seafood and other food have the largest percentage of immigrants in their workforces.

**STAKEHOLDER INPUT**

- “Some are newly arrived Canadians with some language issues. We need to ensure that we are not discriminating the more skilled people due to limited language but we have our own requirements that need to be reached in order for them to understand instructions, health and safety issues, etc. There isn’t a difficulty with the blending of cultures and 99% of immigrant workers are very positive and want to work.”
• “Due to the nature of the job (poor working conditions), immigrants are often employed in frontline positions.”

• “We have found that as our labour has become more culturally diverse, it has meant some changes, but they have been positive ones (i.e. identifying different food preferences, etc.).”

Needs
• Communication with the Canadian Immigration Department regarding needs of new Canadians
• Identify skills sets and programs to assist immigrant workers
• Management training on topics such as managing diversity and cross-cultural communication

9.3 Lack of Awareness/Promotion of Industry

There is currently limited promotion and knowledge of the food processing industry with respect to specific job opportunities. Most employees enter by default, and few actually plan careers within the sector. Other successful sectors that have promoted their industry have allowed them to be recognized as preferred employment destinations.

Few job fairs, courses or educational institutions, highlight food technology or food research and development. The education system has not caught up to the times according to many industry stakeholders. Increased advertising and other promotional materials (i.e. brochures, posters, and websites) need to be created to fuel interest in the sector.

Employers perceive that colleges are not currently offering programs that meet the current needs of the industry. There are selected programs offering certificates and diplomas in selected positions in food processing. For an overview of some of these certificates, programs and institutes please see Appendix 15.

STAKEHOLDER INPUT
• “The industry lacks lustre and is far from glamorous. It is in need of revamping”.

• “La Comité Sectoriel de Main-d’oeuvre en Transformation Alimentaire works to promote the food processing industry in Quebec. This is accomplished through numerous interesting and unique endeavours including in-class visits, career fairs, and school studies that involve the industry. The sector works closely with teachers to provide accurate information on the industry, trade positions, and salary. Similar pan-Canadian initiatives could be implemented.”

• “Most people stumble into the industry and do not make food processing a conscious career choice.”

• “Not the most glamorous sector to work in – no kid wants to grow up and work in a slaughterhouse.”

• “Salary is not competitive compared to other manufacturing industries.”
Needs
- Work with academic institutions and industry stakeholders for a collaborative approach to promoting the industry and need for specific skills sets
- Liaise with government to work on training needs by sector and hold job fairs at high schools and other promotional campaigns to promote the industry as a viable option for employment

9.4 Working Conditions

Many sectors within the food processing industry present less than ideal working conditions. Extreme temperatures as those in bakeries deter more skilled workers from the industry. Similarly, the cold and damp environments of meat and poultry processing plants often attract less skilled labour.

Due to the need for processing facilities to maximize capacity, this often requires split shifts and weekend work that allow for maximum production. Monotonous line work, combined with a less than attractive work environment contributes to high turnover.

STAKEHOLDER INPUT
- “Alberta's unemployment rate is 3% and we are competing with the oil and gas industries that pay very good salaries. It is hard to find qualified staff and people that are willing to work in a cold, damp environment.”
- “It is not as attractive for people to enter the industry so they are going to other jobs.”
- “People are in the food industry for more of a transitional position until they can move into higher paying jobs. Therefore, there is high turnover and much time and money spent on training that never sees a return on investment.”

Needs
- Consult with employees and employee groups to identify working conditions issues and collaboratively provide feedback to employers regarding suggestions for improvement.

9.5 Retention

Keeping and retaining a qualified workforce is a challenge in any industry. The food processing industry is often referred to as a “stepping stone” to other jobs in better paying sectors. It is imperative that retention become a key mandate of food processing industries. Employee retention may be improved through a variety of tools including succession planning, internal promotions, job rotation, and skills and training development.

Employers tend to invest in training that is company and job specific, however training in skills that are transferable are less often invested in – skills that can be utilized in a variety of roles and companies. These skills are desirable by employees as it provides them with greater flexibility and increased marketability. Employers are leery to invest in transferable skills as employees may be trained and then leave to join another firm.
Many small and medium sized processors are trying hard to remain competitive and keep up to the changing industry, that they lack the time to train their staff. “We're so small and hands-on that we're understaffed. With so much to do and being in a growth mode, we can’t afford to do much training other than on-the-job.” 55 Most processors are too preoccupied with immediate issues than to prepare strategic plans for human resource development.

**STAKEHOLDER INPUT**

- “If I send an employee to a training course, my plant efficiencies suffer. Some courses last more than 15 weeks. Do I hire someone to fill that person’s position and lay them off after 15 weeks? I don’t think that is fair.”

- “We find it difficult to keep employees once they are trained.”

- “Training is time consuming especially if you don’t end up retaining the employee.”

- “Difficult to keep people interested. This is a difficult industry in terms of environment to work in. Need to offer them rotating shifts, advancement opportunities etc., in order to keep people. Have seen that offering increases in wages based on longer term work commitment has been effective.”

- “Very difficult to show a return on investment – to prove to management that it actually works. Often training dollars are the first to get cut in budgets and it takes a considerable amount of time to train. This is production time and difficult to even fill let alone allow someone to be trained during this time.”

**Needs:**

- Work with employers to develop incentive programs which improve skills and are tied into staged wage increases based on skill development and production efficiencies

- Make training and skill development a priority – especially in small and medium sized operations

### 9.6 Attrition

Attrition is a general decline in the workforce due to retirement or resignation. Worker age is an important factor in examining human resource needs and requirements as it accurately predicts when new workers will be needed to fill vacated positions. The average age of workers in the food processing industry is only slightly higher than that of the general labour force56 and most industries will be impacted by this massive exit of workers.

Slow population growth has made the population 55 and over an important potential source of labour. During the past 10 years, Canadians aged 45-64 have increased almost 35.8% to nearly 7.3 million.57 Baby boomers are fast approaching retirement and as a result, many employees will be leaving the industry. Many “key” plant positions are filled by baby boomers that have the experience and expertise to solve line and equipment issues. These roles are vital to plant efficiencies.

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56 Workforce Ahead Summary - A Labour Study of Ontario’s Food Processing Industry.

57 Statistics Canada, Catalogue no. 75-001-XIE. [http://www12.statcan.ca/english/census01/Products/Analytic/companion/age/canada.cfm](http://www12.statcan.ca/english/census01/Products/Analytic/companion/age/canada.cfm)
STAKEHOLDER INPUT

- “One thing we need to address is that these experienced workers are aging and we need to think about how to ensure that younger staff is attracted so that we have some succession planning in this sector.”

- “Our training positions are being downsized but we move people around to help fill that role as needed in creative ways – i.e. people coming back from leave.”

Needs:

- Develop strategic plans to meet the void left by a retiring baby boomer population through initiatives such as succession planning, job rotation and mentoring

9.7 Turnover

Turnover is defined as the percentage of the workforce that leaves a company and needs to be replaced in a one-year period. Most hiring in the food processing industry is a direct result of employee turnover, not growth. Turnover is an ordinary event in the workplace, however it becomes a problem when it is especially high and begins to cost a firm time and money. Losing a needed worker means recruiting, hiring, and training a new one, although some workers may be replaced internally.

Losing an employee does bring an employer many costs that often impair productivity and can be detrimental in the food processing industry’s highly competitive environment. However, an employer may also view turnover as an opportunity to recruit workers with skills that can meet the emerging demands of new technologies.

Turnover rates in the food processing sector differ based on the size, and sector of a firm. Although there are exceptions to all industries, small firms (defined as having under 50 employees) have a turnover rate of approximately 6.5%, medium (51-200 employees) 17.5%, and large 4.5%. However, some multi-national firms may have turnover rates as low as 1-2%, and some small and medium firms may have rates as high as 20–30%.

The above statistics are not true in all cases. Work culture plays a vital role in determining rates of turnover. For instance, J.M. Schneider competes in the meat processing industry, which is generally characterized by high turnover, but due to a nurturing work environment and excellent work culture, J.M. Schneider does not experience high turnover.

Firms with lower employee turnover generally have more to offer their employees. They typically offer employees higher wage rates, organized training, an appropriate social and cultural environment, tracks for upward mobility, and a feeling of job security.

Companies with rates of higher employee turnover generally offer non-competitive wage rates, unfulfilling social and cultural environments, limited feelings of job security, and no training or employee track programs. High turnover firms tend to hire a large number of New Canadians and possess few long-term employees (5 years or more tenure).

58 Toronto Labour Force Readiness Plan – The Food Processing Industry in the Toronto Region
59 Toronto Labour Force Readiness Plan – The Food Processing Industry in the Toronto Region
The food processing industry sectors experience differing rates of turnover. The meat sector tends to have higher turnover rates, due to a cold work environment, and repetitive work. Smaller firms in the meat sectors have the highest turnover rates.

**STAKEHOLDER INPUT**

- “The whole industry has been devalued and there is high turnover, especially for general labour positions.”
- “Costly to lose employees due to high turnover.”
- “Where larger companies are focusing on both the easy, quick fix methods as well as the longer term solutions, smaller companies are just trying to maintain competitiveness with implementing HACCP which is required for them to compete – they have little time to think strategically.”

**Needs**

- Work on attracting and sourcing the proper people initially to help with retention and lower turnover

### 9.8 Wage Rates

The processing industry’s wage rates generally lag behind the rest of the industrial economy. According to Statistics Canada, the average annual salaries for employees of the food manufacturing sub sector fell from $31,064 in 1994 to $30,869 in 2003 or at -0.1% per annum. There was an increase of 4.0% over the 2002-2003 periods. In 2003, workers in the food manufacturing sub sector were paid $30,869 on average. This compares to the average of $43,186 for the manufacturing sector as a whole.

The annual wages of food processing sub-sectors are listed below:

**Table 1.1 Annual Average Salaries by Canadian Food Processing Industries**

<table>
<thead>
<tr>
<th>Food Processing Industries</th>
<th>Annual Average Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Food Manufacturing</td>
<td>$29,133</td>
</tr>
<tr>
<td>Grain and Oilseed Milling</td>
<td>$42,577</td>
</tr>
<tr>
<td>Sugar and Confectionary</td>
<td>$33,702</td>
</tr>
<tr>
<td>Fruit and Vegetable Processing</td>
<td>$26,995</td>
</tr>
<tr>
<td>Dairy Product Manufacturing</td>
<td>$34,813</td>
</tr>
<tr>
<td>Meat Product Manufacturing</td>
<td>$27,316</td>
</tr>
<tr>
<td>Seafood Product Preparation and Packaging</td>
<td>$14,619</td>
</tr>
<tr>
<td>Bakeries and tortilla manufacturing</td>
<td>$26,781</td>
</tr>
<tr>
<td>Other food manufacturing</td>
<td>$25,852</td>
</tr>
</tbody>
</table>

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60 Source: Statistics Canada, Annual survey of Manufacturers, CANSIM, Table 301-0003.
Low wage rates in the food processing industry contribute to high turnover rates especially in small to medium sized companies. Food processing companies do not offer production employees the competitive wages needed to retain them, due to resource constraints and cost-benefit trade-offs. Not only are the wages uncompetitive, they have also been declining since 1997. Small companies unable to retain workers and offer competitive wages have adopted a strategy of hiring cheap unskilled labour, and no training to offset constant recruitment, training, and hiring costs due to frequent turnover.

STAKEHOLDER INPUT

• “We find it very difficult to source and retain general labour. We compete with call centre wages of $20/hour.”

Needs

• Work with industry to determine the opportunities related to wage rates and productivity
• Work with the government to develop subsidy programs for training to help offset the initial costs to companies as well as programs and funding to assist with the costs of training and development

9.9 Unionization

UFCW and the CAW present two significant union forces in the food processing industry. The United Food and Commercial Workers (UFCW) union is one of Canada’s largest, representing more than 230,000 workers in Canada’s food industry. UFCW is not unique to packing houses and bakeries, but also represents employees in supermarkets, warehouses and other food related workplaces. Listed below are just some of the employers of the UFCW:

• Cargill
• Maple Leaf
• Maple Lodge
• Nestlé
• Cadbury
• Olymel
• Parmalat

On average, wages are higher for unionized men and women. In fact, the overall wage difference between unionized and non-unionized male workers is about $1.75 an hour. For unionized women, wages are generally much higher than non-unionized female workers. In fact, unionized women make approximately $4.25 more an hour than non-unionized women. With respect to gender-based wage gap, unionized women on average earn 89 cents for every dollar a male earns, while non-unionized women earn only 75 cents for every dollar a man makes. Union density rates are highest in Newfoundland and Quebec.

STAKEHOLDER INPUT

• “Unions provide a good structure in which to train workers.”

Needs:

• Work with unions to understand needs in the industry and utilize the structure to implement training

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61 Toronto Labour Force Readiness Plan – The Food Processing Industry in the Toronto Region
9.10 Seasonality

Sectors offering temporary work generally offer the lowest wages. In 2003, the Canadian Labour Market survey found that the average wage of permanent employees was $18.65, while the average wage for a temporary worker was $13.63 (temporary employment may include contract, casual, and seasonal work – majority are term or contract with set end period).\textsuperscript{63}

Many seasonal employees see their employment as temporary income until they find work better suited to their qualifications.\textsuperscript{64} Many firms in food processing are forced to turn to employment agencies to replace workers on a weekly or even day-to-day basis. Temporary replacement workers often have negative implications on production efficiencies due to learning curve lag times. Due to the low wage rates typically offered by seasonal employment, it is difficult to source skilled labour. Furthermore, the high rates of turnover often characterizing seasonal employment make investment in training risky. It is often unlikely the majority of workers will be returning the following season. If so, their training has been kept on hold and may not be retained for use during the following season.

Furthermore, employees working for smaller firms in the fruit and vegetable processing industry may also find themselves with more or less work depending on the season and climate, causing them to frequently change employers or exit the industry upon finding year-round employment.

STAKEHOLDER INPUT

• “Our main issue with regards to global competitiveness is low labour costs. Our competition produces tremendous products and they have facilities that operate 52 weeks per year opposed to more seasonal plants. We try to reduce labour and keep costs down to compete.”

• “Middle supervisory skills are very difficult to retain. Since the plant only operates 25 weeks out of 52 makes it challenging as well to attract skilled employees. Due to this, usually attract local people and progress them through the system.”

• “[We] find it difficult to source Q&A, health and safety people as well as engineers for a seasonal operation.”

Needs

• Work with processors to examine capacity costing alternatives
• Cost benefit analysis of capacity costing investment
• Focus on smoothing out product line capacity and increase volumes by partnering with processors in complimentary industries
• Source skilled labour on a seasonal basis – capacity costing initiatives


\textsuperscript{64} Toronto Labour Force Readiness Plan – The Food Processing Industry in the Toronto Region
The evolving food processing industry is facing unparalleled change and complexities. There are several real and substantial issues with respect to preparing the industry’s workforce to meet current industry demands.

Commonalities with regards to human resource issues range from recruitment and retention, through to training and skills development despite the size and sector of an operation. The true impact of human resource deficiencies does not seem to be realized by the industry as they struggle with other solutions such as increasing capacity and advancing technology in order to remain competitive in an increasingly global market.

It is imperative that food processing stakeholders begin examining the evolving human resource and skills development issues facing the industry. Similarly, new communication mediums and frequencies are necessary to increase each processor’s competitiveness in a continuously changing environment.
10.0 NEEDS SUMMARY

The information presented within this report attempts to provide the reader with an understanding of both the changing dynamics of the food processing industry in Canada as well as its occupational composition and structure. In analyzing the impact these changes have on the industry’s workforce, key needs and priorities were uncovered based on an assessment of industry research as well as numerous stakeholder interviews.

Each area of analysis presented a different view on the demands and priorities facing Canadian food processors and their human resources. Although the stakeholders interviewed were diverse in terms of the products produced, size, and location, many shared common issues of competitiveness and human resource issues.

In most instances, the identified needs that culminate sections 8.0 and 9.0, Industry Realities and Human Resource Needs and Challenges respectively could be grouped into three areas of focus: Communication, Market Knowledge and Training and Skills Development. Advancing the industry’s competitiveness depends greatly on meeting and further defining the needs in each of these areas:

| Pillar #1 Communication | Pillar #2 Market Knowledge | Pillar #3 Employee Training and Skills Development |

Each pillar represents unique issues, however they should not be perceived as mutually exclusive. Each remains heavily dependent on the other in order to provide the most effective and strategic solution. For instance, Training and Skills Development initiatives should be based on real and accurate Market Knowledge and delivered using the most appropriate Communication forum.

Pillar #1 - Communication

Communication and information sharing is a critical component of advancing the food processing industry. The ability to share, exchange ideas, and offer suggestion in a supportive forum could be invaluable to keeping all players in a constantly changing environment.

The Communication Pillar could encompass liaison with industry, the government as well as academic and training facilities. It could be executed through a variety of mediums that include trade journals, the internet, meetings, as well as having a physical office that represents the communication hub.

Industry identified the following communication needs:

- Liaise with government regarding training offered to immigrants to help them adjust to their new living environment
- Communication with the Canadian Immigration Department regarding industry needs
- Work with academic institutions and industry stakeholders for a collaborative approach to promoting the industry and need for specific skills sets
- Liaise with government to work on training needs by sector and to hold job fairs at high schools and other promotional campaigns to promote the industry as a viable option for employment
- Consult with employees and employee groups to identify issues and collaboratively provide feedback to employers regarding suggestions for improvement
Work with employers to develop incentive programs which improve skills and are tied into staged wage increases based on skill development and ability to increase production.

Develop succession planning guides and in-house training to bring new people on as older workforce exits.

Work on attracting and source the proper people initially to help with retention and lower turnover.

Work with processors to address capacity costing issues and determine cost benefit analysis for investment.

Focus on smoothing out product line capacity and increase volumes by working with like processors.

Templates and information regarding HACCP and other food safety standards (generic information to ease the learning curve on standard food safety issues – could be as simple as a checklist for employees).

Understand the diverse regulations and legislations that govern export markets – perhaps through the use of a hot line/toll free information number.

Assistance with materials written specifically for ESL (English as a Second Language) workers.

One body to oversee the various funds available to food processors with respect to skills and training development (See Appendix 15 for a list of the diverse range of funds available currently) to maximize use and ROI of funding.

Pillar #2 – Market Knowledge

Market Knowledge is necessary to effectively competing in both the domestic and global markets. Information on new products, consumer and customer trends, as well as the needs of retailers and commercial food operators is necessary to gaining and maintaining market share.

The Market Knowledge Pillar would include strategic workshops on trends, product development and developing markets and would be heavily connected with the Communication Pillar in an effort to maximize effective information transfer. Industry identified two necessary functions within the Market Knowledge pillar:

1. Workshops
2. Resources

Industry identified the following market knowledge needs within the Workshop and Resource categories:

Workshops:

- Provide workshops in technology, work with suppliers to develop programs that are conducive to the work environment.
- Offer workshops in quality assurance, food safety, regulatory changes, labelling, etc.
- Provide workshops on consumer trends impacting food processors and new product development (see Section 5.0 – Consumer Trends).

Resources:

- Offer information on product opportunities for each sector.
- Conduct strategic new product analysis by sector and prepare recommendations for strategic new products that capitalize on efficiencies.
- Training for Research & Development (R&D) personnel.
- Offer advice in dealing with food borne diseases as well as animal related diseases.
• Fully understand the needs and strategies of retailers by conducting national and international surveys on listing requirements, distribution needs and industry protocol (sales calls, marketing needs, etc.)
• Design a program that focuses on improving plant efficiency, plant costing and use activity based costing measures
• Develop innovation around production for more efficient design
• Understand major technology advancements and implementation into the industry
• Understand in-plant efficiencies and the impact of the related food chain
• Understand vertical coordination and vertical integration by sector
• Ability to access a website for information on consumer trends and consumer research

Pillar #3 – Employee Training and Skills Development

Employee Training and Skills Development is essential to meeting the evolving and increasingly sophisticated demands of the food processing industry. Common standards for key positions would be helpful to implementing training initiatives among diverse sectors. Improving the knowledgebase throughout the industry as well as harmonizing the roles and requirements of various positions would provide employers with a greater pool of qualified workers from which to source.

Some positions will be more critical in preparing food processors for success in the future. HACCP, research and development, key line workers and skilled trades (such as electricians) are all positions that will require marketing in order to attract qualified and interested candidates. Management as well as engineers and cost accountants will also be vital to increasing the efficiency, and overall competitiveness, of food processors.

Industry identified the following training and skills development needs:
• Training has been identified as a major cost to the industry. Work with government to develop subsidy programs for training to help offset the initial costs to companies
• Work with unions to understand needs in the industry and utilize the structure to implement training
• Approach training needs with a strategic focus so skills sets are matched with technology advancements and industry requirements
• Conduct a study to determine general and skilled labour needs focusing on specific areas (i.e. maintenance, on-line supervisors, R&D, HACCP, electricians, etc.)
• Harmonized guidelines for HACCP coordinators and quality assurance/insurance inspectors
• Set standards for each strategic occupational profile
• Workshops for key people on the line including communication, process efficiency, and general line maintenance
• Identify recruitment and orientation challenges by sector and region
• Determine needs regarding skilled trades and implement standards for improving knowledge base and offers employees a basis for hiring
• Develop strategic plans to meet the void left by a retiring baby boomer population including succession planning, job rotation and mentoring.
11.0 ACTION PLAN

After a careful review of Canadian food processing industry realities, and a subsequent evaluation of the human resource needs and challenges facing the sector, several recommendations for the industry have been developed. The foundations of all recommendations are to support labour and skill development within the entire Canadian food processing sector, addressing the three key areas identified earlier:

<table>
<thead>
<tr>
<th>Pillar #1 Communication</th>
<th>Pillar #2 Market Knowledge</th>
<th>Pillar #3 Employee Training and Skills Development</th>
</tr>
</thead>
</table>

The following options present three diverse recommendations that require varying levels of resource commitment and organization.

11.1 Option #1 – National Food Processing Sector Council

One option to address many of the industry challenges identified may be to create a National Food Processing Sector Council to share information that could assist Canadian food processors with labour and skills development. In addition, a sector council could be used to discuss related market information which may help companies expand and grow their businesses. This forum could be executed by an umbrella organization that would include representatives from business, labour and government.

Food processors have identified that recruitment, retention, and training are major issues regardless of their business focus. By identifying harmonized training standards with regards to food processing related issues such as food safety, food processors would be able to increase the knowledge base of their labour force. This would also help the industry make hiring processes more efficient. Better skill development will also bring more qualified workers to the industry.

Improving communication of regulatory issues facing the industry through one information body will help with the development of policies and the understanding of issues in order to smooth their implementation. Becoming more streamlined with the U.S. and reducing small regulatory differences will make it easier for food processors to increase export opportunities, as well as be more competitive at home. While this has been attempted in the past, it would be helpful to be led by one, national organization.

The following objectives of a National Food Processing Sector Council would include:

1) **Objective** - Organizational Structure – led and governed by one body
   **Strategy** - Food processor membership of more than 25 members in Year 1
2) **Objective** - Education
   **Strategy** - Training, labour, market, and consumer information
3) **Objective** - Communication
   **Strategy** - Government, industry, unions, academic and training centres
4) **Objective** - Benchmark
   **Strategy** - Elements to improve process
   - Process and yield improvement recommendations
The overall organizational structure will be dictated by the needs of the food processing industry. That is, a forum for information exchange may be more suitable than a highly departmental structure. The elements of education, communication and benchmark research are to be explored and discussed with industry stakeholders to identify priorities and relevance. A forum such as this was generally well received among the food processors surveyed. They did, however, question how this type of structure served them in terms of current associations such as provincial food processor associations that represent regional interests.

The ability to meet the needs of food processors across Canada needs to be further explored with more targeted research. Perhaps a series of workshops or open forums for food processors in regions across Canada would be helpful to gain a more thorough understanding of the needs for human resources and skills development. The following outlines “Recommendations for Action” that would be required to execute this recommendation:

**Recommendations for Action:**

**Option #1 – National Food Processing Sector Council**

**National Food Processing Sector Council**

For one overseeing body to be successful in truly serving the needs of the food processing industry, further research should be executed in determining the needs of the industry, by sector. The objectives put forward above are only a starting point and should be explored and defined to truly develop a useable format for the industry. A collaborative approach is required which includes opening discussions among government, industry, academic and training institutions and unions.

**Action Plan – National Food Processing Sector Council**

- Take the initiative to further research the human resource needs based on region and business sector to define the scope of issues. Utilize this opportunity to further examine the interest in a national organization to assist with human resource issues
- Liaise with government to determine the level of support for a national organization that will focus on the human resource issues of the food industry
- Collaborate with academic and training facilities as well as other food processor associations to gain perspective and develop a partnership to approach solutions for the industry
- Develop recommendations and strategies that will assist the food processors in labour and skill development issues, both current and long term
- Define the organization’s role in human resource issues based on the needs of the industry and develop a communication plan
- Implement and execute human resource solutions for the food processing sector utilizing a collaborative framework that includes industry expertise (i.e. management, consultants, and unions), government and academic and training institutions

**The Food Processing Industry**

Identifying the labour and skill development needs will require food processors to collaborate in regards to major issues. The labour and skill requirements must be communicated clearly in order to build an infrastructure for long term solutions. Working with internal labour groups as well as industry and human resource experts will help complete and enrich the proposed outcomes and reduce implementation challenges. This information can form the basis for developing standards based on the industry needs which can then be communicated to academic and training institutions to provide the framework for programs.
Action Plan - Industry
- Management and unions must work together to assess their strengths and weaknesses regarding human resources – both for general competencies as well as specific skill development
- Management should do its best to provide a vision for company strategic growth to help identify gaps in human resources
- Collaborate with academic and training institutions to identify areas that need to be developed more fully or included in order to produce potential employees with useful skill sets
- Communicate with government regarding regulatory issues that impact human resource and skills development and work to develop solutions that are mutually beneficial
- Develop training and skills development programs that allows for employee input and is flexible in structure to adapt to various learning styles, academic levels, and languages
- Participate in forums with other food processing industry representatives to discuss non-competitive human resource issues in order to generate human resource solutions

Government
Government involvement includes heightening their awareness of the skills and labour development issues facing the food processing industry. This includes reviewing the impact of regulations and working collaboratively with industry to increase their understanding of necessary protocols. Building this alliance will help to create discussion of issues that can further assist in growing the food processing sector such as food safety standards and harmonizing regulations for export markets.

Action Plan - Government
- Provide support to the food processing industry by collaborating with businesses to build a sustainable infrastructure for human resource development
- Address gaps in current academic and training centre programs, including apprenticeship programs, and develop them to ensure they meet the needs of the current and future direction of the industry
- Review regulatory issues affecting the competitiveness of the food industry, including export, food safety, and immigration
- Participate in collaborative discussions with industry, academic and training centres, industry experts and unions
- Support the development of a communication system that promotes information transfer among industry stakeholders
- The proposed National Food Processing Sector Council would be compensated for under the Human Resource and Skill Development’s Sector Council program

Academic and Training Institutions
Academic and Training Institutions will review and examine training programs that they have developed and use this as a building block or base for fulfilling industry needs. Consultation with industry experts and assessment of other country’s training and development programs may offer insight into building a sustainable labour and skills development structure for Canada.

Action Plan – Academic and Training Institutions
- Participate in collaborative meetings with industry to identify the training and skill development needs
- Communicate within the training sector regarding possible solutions that may be adapted to the food processing industry
- Prepare recommendations that can be discussed with industry and government to develop a sustainable infrastructure for the food processing sector
- Define areas that require additional resource support and be progressive in updating and adapting to the needs of the industry
STAKEHOLDER INPUT – OPTION #1 NATIONAL FOOD MANUFACTURING SECTOR COUNCIL

• “Yes, however need to understand the benefit. Already belong to B.C. Food Processors Association that has a focus on health and safety and human resources, so if there are other benefits and there is not overlap, may be interested.”

• “Yes but there are food processing associations out there and don’t want overlap. What would be the difference that this group offers? Could see value in open communication with peers on non-proprietary information such as best practices on certain issues.”

• “Might think about it but we are involved in food processors association and would want to understand how this would be different.”

• “Yes, it would be good for the food industries to come together. Small companies may find it very beneficial if there was an opportunity to understand technology trends in other countries as they cannot send people there. Larger companies will probably take this task on themselves.”

• “I see this as an opportunity, but I have concerns regarding confidentiality and some organizational cultures are not as open to sharing information. Would find templates or generic framework manuals helpful for setting internal standards for things like workplace safety. It would be helpful to have a place to start and then we can tailor to our needs.”

• “The food processing associations try and bring information to processors to help them become more competitive and to be more innovative by offering information to help them understand the market. This doesn’t have to be information that is confidential or be seen as giving someone a competitive advantage, rather information that helps companies on issues, so they are not starting from scratch. Perhaps the food processing associations could be linked in to work together with this initiative.”

• “Training small and medium sized firms is a real challenge that must be addressed by both industry and government to ensure their survival. This could be as simple as creating base templates for such things as HACCP, food safety standards, and workplace communication.”

• “I have belonged to a workplace safety association that has a chat room to share issues and challenges and have found that very helpful to understand how others have dealt with situations.”

• “Yes, we would be interested. A proposed pan-Canadian sector council would definitely need to have sub-sectors though to provide useful support to members. Additionally, for it to be feasible, one province/sector would have to lead it in order to maximize funding and reduce the strain of organizing such a large and diverse group.”
11.2 Option #2 – Skills Development Centre

One viable recommendation for food processors may be to offer support to allow them to implement a customized recruitment and training strategy that is linked to specific, long-term business goals. This would ensure that a “canned” approach to training was not pursued, despite commonalities among industry players.

Some industry reports suggest that there is a general lack of urgency regarding skill and labour development; however there are companies that are struggling with even very basic human resource issues. The ability to access a forum to target very specific training and recruitment needs would be beneficial and could evolve into a strategic human resource development program as the company evolves.

Employees need to see they have a future with the company, through transferable skill development, job training and job rotation, and a visible track for advancement. Employees value opportunities for continual learning and formal recognition from their employers. The reward for companies that train their employees is not only better qualified candidates, but more loyal and dedicated employees.

Recommendations for Action:
Options #2 – Skills Development Centre

Skills Development Centre
A customized approach to human resource development was expressed as a need by some food processors. They require program coordination including facilitation to conduct a needs assessment and to translate external environment issues. As the program develops, the Skills Development Centre would develop a greater understanding of the related and unrelated issues throughout the industry and be able to make qualified recommendations regarding pressing issues.

Action Plan – Skills Development Centre
• Develop a structure to support industry to develop customized human resource plans which include industry experts, consultants, academic and training centre personnel and project management
• Prepare a framework for executing internal needs assessments as well as external reviews that offer recommendations regarding the design of human resource plans
• Conduct a strategic business review that identifies the intended vision regarding company growth in order to build a sustainable and meaningful human resource plan
• Collaborate with management, unions, academic and training centres as well as other industries to identify a workable format for labour and skills development, including human resource elements such as recruitment, retention and incentives
• Present the company with a customized plan for human resource development that builds on the business’ vision, mission and long term business goals

Food Processing Industry
Senior management must agree to make a considerable investment in order to conduct such a human resource exercise. They will require support from government to help them design, develop and implement this program to lessen the disruption to their production. The system should be developed to be flexible and respond to the needs of the workforce. This would be accomplished by having unions participate in the formation of the program and offering suggestions to address individual and group needs.
Action Plan Food Processing Industry

- Communicate with program coordinators to provide them with an in-depth understanding of strategic business development, current human resource issues as well as the intended direction for growth for the company
- Prepare the company culture to be open to assessment which will enhance the workforce and environment
- Collaborate with academic and training centre representative to identify any human resource program needs and specific curriculum requirements in order to develop a customized program that is flexible and addresses the needs of the organization, management and unions
- Participate in the implementation of the human resource plan, show commitment, and provide follow up feedback regarding the successes and challenges of participating in the program

Government

Human resource plans impact resources considerably; therefore, having a program that supports such initiatives would allow the food processing industry to develop a stronger platform, and ultimately, a stronger workforce. Addressing specific company requirements may seem like a short term solution; however, by implementing human resource plans in this manner, there is an opportunity to gain practical insight which can be translated into longer term planning. This will allow for greater understanding and development to take place regarding a sustainable infrastructure and support mechanisms.

Action Plan - Government

- Oversee the administration and formation of the Resource Centre through a commitment of annual funding
- Designate funding support for human resource planning for the food processing industry
- Provide support for a structure to administer the program including program elements such as needs assessments, external business reviews, design and development of human resource plans, consultation with industry experts, consultants and academic and training institutions
- Utilize the learnings from the program to develop recommendations for industry wide solutions and for long term infrastructure for labour and skills development
- The Skills Development Centre would be paid for by industry membership, or on a “pay-per-use” basis

Academic and Training Institutions

Collaborating with academic and training institutions regarding their current skills development programs and curriculum can help when developing specific solutions for a company. An existing program may be adaptable to workplace learning or adapted to be more flexible to suit the individual company needs. This learning can then be accumulated as other companies participate in the program and used to design courses and training systems so they are more congruent with the food processing sector. As well, utilizing the network of various academic and training centres will provide a considerable knowledge base that the industry could be utilized to build their own customized curriculum.

Action Plan – Academic and Training Institutions

- Academic and training institutions to participate in designing and developing the human resource plan with consultation and input from industry
- Participate in the internal needs assessment and external environment review to gain an understanding of impacting issues
- Strengthen the ability of the company to identify future human resource requirements based on the company strategic plan
STAKEHOLDER INPUT – OPTION #2 – SKILLS DEVELOPMENT CENTRE

- “Online training doesn’t work as it is just too detached. More customized training is more beneficial.”

- “Training based on incentives has been very successful. That is, have available courses for employees for upgrading their skills. When they complete a level they are rewarded. It is very effective and allows people to take responsibility of their own training and they are rewarded for their initiative. These courses were a combination of internal courses as well as those available through academic institutions.”

- “There are no training standards in the food processing industry. Many other manufacturing industries have minimum standards and clearly outlined processes to follow with respect to the way in which jobs are carried out. The industry needs uniform standards to increase transferable skills sets. This will not only make employees feel more comfortable and be more productive, but will also improve the efficiencies of the industry.”

11.3 Option #3 – Annual Industry Conference

There is a need for more open communication among industry, government and other support mechanisms throughout the supply chain. Gaining a greater understanding of issues impacting other food processors and related industries can benefit companies when addressing internal issues. An annual industry conference geared towards the most pressing challenges and opportunities facing the industry could provide assistance to the greatest number of processors within a relatively short time period. The conference could be structured using the three pillar approach.

An annual forum could be used as a tool to raise awareness regarding industry trends, regulatory and legislative directives, challenges and solutions for human resource issues, as well as information on ways to improve the competitiveness of the industry. As a springboard, the initial meeting could offer an industry overview of pertinent issues which can then be reviewed and prioritized by the food processors. With an agreed upon agenda for the next meeting a program chair can then delegate various needed research, identify speakers and organize events to communicate to participants valuable information on topics that are impacting their industry.

Recommendations for Action:

Option #3 – Annual Industry Conference

Annual Industry Conference Organizing Committee

The organizing of an effective and informative industry-wide event will entail the collaboration of government, industry, academic and training institutions, as well as industry experts and consultants. In order for the program to be meaningful, a clear understanding of industry issues would need to be presented to participants. The agenda would need to be accurate, current and actionable in order to assist food processors in bringing ideas and information from the conference into fruition through new products, new markets or better efficiencies.

The organization of the annual industry conference would need to begin with a detailed understanding of regional and business sector needs. This would need to include an in-depth survey of industry experts, company representative, training officials, and government to share their thoughts on relevant industry topics.
Action Plan:

- Form an organizing committee with representatives from government, a variety of business sectors, and academic and training institutions
- Identify government support for such a forum and develop a budget and committee structure
- Build on information provided from this report as well as other reports focusing on labour and skill development as a starting point for identifying areas of focus
- Conduct more detailed research to define issues across various regions and business sectors
- Utilize existing data and build a network of contacts that can provide information on the areas identified from the research
- Facilitate discussion among industry experts, academic and training institutions and government in order to gain a well rounded understanding of the issues
- Develop a conference program based on the topics identified from the research and utilize contacts to identify industry experts that can participate on the agenda
- As follow up to the event, prepare recommendations and suggestions for building on the experience and provide government with feedback on relevant industry issues
Glossary of Terms

Absenteeism - Refers to the number of days of missed work due to being physically or mentally unfit.

Accreditation - Process that an agency or an association uses to grant public recognition to a training institution, program of study, individual or service that meets pre-set standards.

Batch Bakery - Small scale operation that transforms finished multi-products such as breads, cookies and cakes.

Capacity Costing - For the purpose of this report it is defined as costing the products to reflect the efficiencies related to production at full capacity.

CFIA – Canadian Food Inspection Agency

Consumer - The final purchaser of the product.

Core Competencies - A minimum set of standard skills to be able to work in many jobs in one environment.

Customer - Is defined as the organization that purchases the product for distribution and sale to the final consumer. The customer base is composed of retail customers, food service customers and industrial customers. Each segment has a unique set of needs in terms of distribution, packaging, pricing and product performance that must be addressed by the manufacturer.

Cyclical - Fluctuations in economic activity characterized by periods of economic boom and downturn – work is not constant or predictable.

Grocery – A retail category that represents a variety of shelf stable products.

Entrée - The entrée category consists of both fresh and frozen formats and includes all products that have been further processed into meal solutions.

Federal Registration – the level of plant designation required in order to sell product nationally across Canada and for export into the international marketplace. Federal registration is achieved by complying with CFIA plant structural and operational standards and meat inspection regulations.

Food Service Customer - Is defined as the group of customers that distribute and sell products to the hotel, restaurant and institutional food industry.

Functional Food - Similar in appearance to a conventional food that is consumed as part of a usual diet, and is demonstrated to have physiological benefits and/or reduce the risk of chronic disease beyond basic nutritional functions.

Gas Flush - A process of vacuum sealing a bag or package first and then filling the package with a gas blend. The gas blend is designed to increase shelf life.
**Industrial Customer** - A manufacturer that will use the product as an ingredient to produce another product for sale to the retail or food service trade

**Ingredient** - Considered any single food item that is combined with others to create a final dish or meal for consumption

**HACCP** - Hazard Analysis Critical Control Points

**Labour mobility** - Ability for a worker to work in different locations because of a recognized skill set

**Par Bakery** - A bakery facility with the capability to initiate the cooking process of the product and then freeze for finishing rethermalization which takes place at a food service location or customer facility

**Primary Processing** - The limited alteration of raw materials from their primary state

**Process Bakery** - Baking single product offerings on a very large scale, this category is dominated by large multi-level organizations

**Ready-to-Serve (RTS)** – Food items that can be served immediately, or require only heating

**Seasonal** - Work is not constant throughout the year, but generally predictable based on the time of year

**Secondary Processing** - The conversion of ingredients by physically breaking down (cutting, dicing, slicing, etc.) and adding flavour and packaging

**SKU** – retail products are identified by bar codes or other similar identifier, called “skus” which is an inventory control device and aids with traceability of the product

**Speed Scratch** – Speed-scratch cooking is a new trend that refers to dishes which aren’t necessarily made from scratch, but assemble pre-packaged key ingredients which allow consumers to make tasty, original meals with minimal cooking experience, or minimal time. It is an emerging movement that was originally coined by Kraft that includes store bought convenience products like jarred sauce or bagged salads. This sector will soon have its own category as the luxury of time becomes increasingly diminished.

**Upskilling** - Upgrading to study or train to increase one’s level of skills

**Value Added Processing** - Manipulating a product beyond its natural state by extraction, refining, injecting, coating, marinating, smoking, cooking, canning and other forms of pre-preparation

**Value-Added Products** - Products that have been further prepared or have unique packaging to add value for the customer and/or consumer
BIBLIOGRAPHY

AgExporter: Oh, Canada! A vital food and beverage industry add up to big opportunities, August 2002
Agriculture and Agri Food Canada: Retail Sales Data 2002.
Agriculture and Agri-Food Canada Sector Profile: Yogurt June 2004
Agriculture and Agri-Food Canada: Canada’s Confectionery and Chewing Gum Industry Fact Sheet 2003
Agriculture and Agri-Food Canada: Sector Profile: Whey June 2004
Agriculture and Agri-Food Canada: The Canadian Confectionery Industry 2004
Agriculture and Agri-Food Canada: Canadian Dairy Industry Profile 2004
Agriculture and Agri-Food Canada: Sector Profile: Cheese June 2004
Agriculture and Agri-Food Canada: Sector Profile: Ice Cream June 2004
Agriculture and Agri-Food Canada: Sector Profile: Milk and Cream June 2004
Agriculture and Agri-Food Canada: The Canadian Confectionery Industry 2004
Agri-Food Trade Services: Market Information Canada, Quebec Bakery Industry Outlook, April 2004
Alberta Agriculture Food, and Rural Development, Market Forces in the Fruit and Vegetable Industry: Summary
Alberta Agriculture, Food and Rural Development: Understanding New Consumer Trends Can Present New Opportunities
American Frozen Food Institute: Frozen Foods in Food Service, August 2005
An Analysis of Profits within the Canadian Food Processing Sector
Animal Nutrition Association of Canada: Info on the Feed Industry, ANAC
BC Stats, January 2000
Canadian Food Inspection Agency: Regulatory Amendments of the Food and Drug Regulations (Nutrition Labelling, Nutrition Claims and Health Claims)
Canadian Restaurant and Foodservices Association, Foodservice Industry Overview, 2002
City of Toronto: Toronto Labour Force Readiness Plan – The Food-Processing Industry in the Toronto Region 2004
Confectionery Manufacturers Association of Canada: Mars Makes a Leap into Functional Foods, July 5, 2005
Creating Growth Beyond Expectations, Canadian Council of Grocery Distributors (CCGD) and the Food and Consumer Products Manufacturers of Canada (FCPMC), and prepared by ACNielsen TORONTO, ON, September 14, 2001
Essential Skills Profiles for Alberta’s Food Processing Industry. Alberta Food Processing Industry, 2002
Food For Thought Magazine, What Makes us buy? Fall/Winter 2004
Foodservice & Hospitality: Food File, Net Gains, The fish and seafood market is evolving, as Canadian restaurant-goers become exposed to more variety, November 2000
Foreign Agricultural Service Online, 2004: In Canada, A New Competitive Advantage
Comittee Sectoriel de main d’œuvre en transformation alimentaire : Analyse des besions en main-d’oeuvre saisonniere dans les entreprises de transformation et de mise en conserve de fruits et legumes (conserveries), March 2005
Human Resource and Skills Development Canada & Alberta Human Resources & Employment – Finding Work in Food Processing
Industry Canada: Employment – Dog and Cat Food Manufacturing 2003
Industry Canada: Establishments – Dog and Cat Food Manufacturing 2003
Industry Canada: Establishments – Other Animal Food Manufacturing 2003
Industry Canada: Manufacturing Production – Dog and Cat Food Manufacturing 2003
Key Consumer Attitudes in Canada
Market Research.com, Confectionary in Canada.
NSSC: Meeting the Challenge: Canada’s Seafood Processing Industry Market in the 21st Century, 2004
Ontario Centre for Environmental Technology Management: Production Efficiencies In Chocolate Processing
Retail Sales Data 2002. Agriculture and Agri Food Canada.
Sask Net Work – Labour Market Information – Industry Profiles – Food Processing
Saskatchewan Agriculture and Food: Food and Beverage Processing 2002
Statistic Canada: Industry Profile, Canada’s Food Processing Industry
Statistics Canada 2001 : Employment rates, by educational attainment and immigrant status
Statistics Canada 2005: Canadian Food Processing Industries, Structure and Recent Change
Statistics Canada 2005: Full-time and part-time employment by sex and age group
Statistics Canada 2005: Labour force and participation rates by sex and age group
Statistics Canada: Selected dwelling characteristics and household equipment, 2003
The Food Marketing & Distribution Sector in Canada, April 1999
The Hartman Group, Top Ten Food Trends 2005
The Montreal Gazette: Organic Food Booms in Canada, August 8, 2001
Transport Canada: Policy. Canada’s Transportation System, 2003
### Appendix 1 – Sample Major Players – Grain and Oilseed Processing

<table>
<thead>
<tr>
<th>Company</th>
<th>Main Category</th>
<th>Total Sales</th>
<th>Export Sales</th>
<th>Employees</th>
<th>Products and Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parish and Heimbecker Limited - Ontario</td>
<td>Flour milling</td>
<td>$50 million +</td>
<td>$50 million +</td>
<td>750</td>
<td>Wheat, Starch, Corn, Maize, seed, oil seeds, nuts and oil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>total sales</td>
<td></td>
<td>employees</td>
<td>Soft white winter wheat, flour, corn, soybeans</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Frozen turkey</td>
</tr>
<tr>
<td>Canbra Foods – Alberta</td>
<td>Oil seed processing</td>
<td>$50 million +</td>
<td>$50 million +</td>
<td>275</td>
<td>Margarine, salad oil, vegetable oils – canola, cotton, corn, sunflower</td>
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<tr>
<td></td>
<td></td>
<td>total sales</td>
<td></td>
<td>employees</td>
<td>Shortening, vegetable oil based lubricants</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Canola based frying and baking applications</td>
</tr>
<tr>
<td>Bunge Canada - Saskatchewan</td>
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<td>$25 – 50 million</td>
<td>53</td>
<td>Oil seed cake and meal</td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td>employees</td>
<td>Feed, vegetable origin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>Vegetable oils</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rapeseed oil cake and meal</td>
</tr>
</tbody>
</table>
Appendix 2 – Sample Major Players – Fruit and Vegetable Processing

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aliments Carriere – Quebec</td>
<td>Canned and Frozen Vegetable Processing</td>
</tr>
<tr>
<td></td>
<td>Six Plants, 2500 people in peak periods</td>
</tr>
<tr>
<td></td>
<td>Annual Sales worth over $150 million</td>
</tr>
<tr>
<td></td>
<td>Canadian Leader in the canned and Frozen Vegetable Industry</td>
</tr>
<tr>
<td></td>
<td>50 million + sales</td>
</tr>
<tr>
<td></td>
<td>50 million + Export sales</td>
</tr>
<tr>
<td>Golden Valley Foods Ltd. – British Columbia</td>
<td>50 million + sales</td>
</tr>
<tr>
<td></td>
<td>1 to 5 million Export sales</td>
</tr>
<tr>
<td></td>
<td>Fruit and vegetable canning, pickling, and drying</td>
</tr>
<tr>
<td></td>
<td>Jams, jellies, spreads, salsa, cranberry sauce, baby food</td>
</tr>
<tr>
<td></td>
<td>sell to private labels</td>
</tr>
<tr>
<td></td>
<td>175 employees</td>
</tr>
<tr>
<td>Sun-Brite Canning Ltd. – Ruthven, Ontario</td>
<td>Pickling and drying</td>
</tr>
<tr>
<td></td>
<td>50 million + sales</td>
</tr>
<tr>
<td></td>
<td>60 employees</td>
</tr>
<tr>
<td></td>
<td>Pizza sauces, pasta sauce, tomato paste</td>
</tr>
<tr>
<td></td>
<td>Beans, tomatoes</td>
</tr>
<tr>
<td>Midwest Food Production</td>
<td>Producers of frozen and dehydrated specialty potato produces</td>
</tr>
<tr>
<td>(McCain acquired in 2004) - Manitoba</td>
<td>Supplier to McDonalds</td>
</tr>
<tr>
<td></td>
<td>50 million plus total sales</td>
</tr>
<tr>
<td></td>
<td>50 million plus export sales</td>
</tr>
<tr>
<td></td>
<td>450 employees</td>
</tr>
<tr>
<td>McCain Canada</td>
<td>16 processing facilities in 6 Canadian provinces</td>
</tr>
<tr>
<td></td>
<td>4000 employees</td>
</tr>
</tbody>
</table>
## Appendix 3 – Sample Major Players – Meat and Poultry Processing

<table>
<thead>
<tr>
<th>Top Canadian Meat Processors</th>
<th>Caravelle Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cargill Foods</td>
</tr>
<tr>
<td></td>
<td>New Food Classics</td>
</tr>
<tr>
<td></td>
<td>Cardinal Meat Specialists Ltd.</td>
</tr>
<tr>
<td></td>
<td>Maple Leaf Foods Inc.</td>
</tr>
<tr>
<td></td>
<td>Better Beef Ltd.</td>
</tr>
<tr>
<td></td>
<td>European Quality Meats and Sausages</td>
</tr>
<tr>
<td></td>
<td>Lakeside Packers Ltd. (Tyson)</td>
</tr>
<tr>
<td></td>
<td>Olymel and Co. Ltd.</td>
</tr>
<tr>
<td></td>
<td>Schneider Corp.</td>
</tr>
<tr>
<td></td>
<td>Viandes du Breton Inc.</td>
</tr>
<tr>
<td></td>
<td>The Meat Factory</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Top Canadian Poultry Processors</th>
<th>Ag Marche</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lilydale</td>
</tr>
<tr>
<td></td>
<td>Maple Leaf Poultry</td>
</tr>
<tr>
<td></td>
<td>Maple Lodge Farms Ltd.</td>
</tr>
<tr>
<td></td>
<td>Quality Meats</td>
</tr>
</tbody>
</table>
# Appendix 4 – Sample Major Players – Bakery

<table>
<thead>
<tr>
<th>Company</th>
<th>Description</th>
</tr>
</thead>
</table>
| Canada Bread     | 18,000 employees  
Subsidiary – Maple Leaf Bakery  
Brands: Dempsters, Tenderflake, etc. |
| Boulangerie Gadoua | In business since 1911  
Three bakeries and 14 distribution centres  
700 employees  
Sells products in Ontario, Quebec and the Maritimes |
| Weston           | More than 15,000 employees in bakery division  
(U.S. and Canada)  
Founded in 1882 and through its operating subsidiaries constitutes one of North America’s largest food processing and distribution groups |
Appendix 5 – Food Processing Industry Regional Overview

The map represents the relative contribution by province or region to the Canadian total production within each sector.
Appendix 6 – Levels of Canadian Food Processing

Processing Types
The food processing industry in Canada may be broken down by three major sub-components. For the purposes of this report, the sub-components have been defined by the consulting group as follows:

- Primary processing;
- Secondary processing; and
- Value added processing.

Primary Processing
Primary processing involves the limited alteration of raw materials from their primary state. The Canadian food processing industry is facing significant federal and provincial regulatory changes that include environmental protection, nutrition labelling, and waste disposal and diversion. Additionally, the labelling of genetically modified organisms (GMOs) may soon become mandatory. All of these factors place additional demands and responsibilities on the industry and its workforce.

Examples of Primary Processed Products:

<table>
<thead>
<tr>
<th>Examples of Primary Processed Products:</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat</td>
<td>Whole Muscle Meat Cuts</td>
</tr>
<tr>
<td>Fish and Seafood</td>
<td>Lobster, IQF Shrimp</td>
</tr>
<tr>
<td>Vegetable</td>
<td>Bagged Potatoes, Carrots</td>
</tr>
</tbody>
</table>

When dealing with perishable items, in particular meat and poultry, new demands are being placed on production processes and processing industry workers. Some of the evolving skills and knowledge requirements include: HACCP (Hazardous Analysis and Critical Control Points); WHMIS (Workplace Hazardous Materials Information System); and other safe handling and disposal practices.

The introduction of gas flushing capabilities has increased the shelf life of many primary processed goods. This technological advancement has also allowed competing products from outside the country to be shipped further distances, increasing product competition at home.

Secondary Processing
Secondary processing is the conversion of ingredients by physically breaking them down (cutting, dicing, slicing, etc.) then adding flavour and packaging. Secondary processing involves combining foods in a particular way and changing their properties, through activities such as breading and battering. New cost-efficient technologies are being developed in the food processing industry. As the industry-wide use of new technology spreads, employees will need the skills to adapt.

Examples of Secondary Processed Products:

<table>
<thead>
<tr>
<th>Examples of Secondary Processed Products:</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meat</td>
<td>Steaking Operations</td>
</tr>
<tr>
<td>Fish and Seafood</td>
<td>Filleting, Battering and Breading</td>
</tr>
<tr>
<td>Vegetable</td>
<td>Gas Flushed Vegetables</td>
</tr>
</tbody>
</table>
A huge up-surge in U.S. production subsidies has caused serious concerns that Canadian producers may not continue to process food products profitably due to this increased international competition, particularly within the grain and oilseed sectors.65

**Value Added Processing**

Value added processing activities generally include extraction, refining and formulation and/or cooking or preparation to an edible state. Value added products often provide solutions to meet the needs of the evolving consumer population. There is an immediate need to focus on the end consumer in the value chain. Consumers drive the market and ultimately differentiate successful processors from unsuccessful ones.

Value added products have been further prepared and have unique packaging to add value for the customer/consumer. For instance, producing baked goods from flour, sugar, salt, yeast, eggs, water, and vegetable oils turns these ingredients into a value added product. Bakeries add 50 percent to the value of the products they process, which is greater than any other food processing sector. Meat processors add 22 percent of value to the products they produce, which is the least of all sectors. On average, industries in the food processing sector add approximately 32 percent to the value of the products they process.66

**Appendix 7 – Category Review**

**Bakery**

The fastest growing segment in the bakery category in 2003 was frozen and refrigerated dough. In fact, frozen bakery products in North America grew 8 percent in 2003 with $124 million in sales in Canada alone. Dual income households increasingly lack the time to bake, leading to a growing number of in-store bakeries offering pre-made breads, desserts, and other baked items. Both in-store bakeries and frozen bakery products answer a consumer desire for fresh baked items without the intensive labour involved with homemade baking.

**Dairy**

The dairy category consists of several products which account for the majority of processed sales in the industry.

**Milk and Cream**

Ranked fourth in world milk production, and accounting for 7.9 percent of the world total, Canada has a steady supply of milk amounting to 2.6 billion litres per year. Fluid milk is processed in 178 plants across Canada by 5973 employees. The major players in the fluid milk industry are Agropur (with plants in Ontario, Quebec and British Columbia), Parmalat (with plants in Ontario, Quebec, Alberta and Manitoba), Saputo and Neilson (with two plants in Ontario). Overall fluid milk consumption is on a decline, but there is growth in cream products as well as low-fat milk products (1% and skim).67

65 http://www.soybean.on.ca/farmersfeed_view.php?id=27
67 Sector Profile: Milk and Cream June 2004, Agriculture and Agri-Food Canada
Cheese
Canada is the tenth largest producer of cheese in the world, producing 366,356 tonnes in 2004. Over 80 percent of Canadian fine cheese products and 15 percent of raw milk cheeses are produced in Quebec. The industry is dominated by Agropur (18.9% market share), Kraft (23.3% market share), Parmalat (12.3% market share) and Saputo (25.5% market share).

Whey
An annual production of 39,164 tonnes in 2004 (a 58.7% decrease from 2001), Canada is the seventh largest world producer of whey and its by-products. Whey is a by-product of cheese, and is high in protein. Whey may be used as a substitute for skim milk powder in nutritional drinks, soups, baked goods, etc.68

Yogurt
Yogurt is currently marketed in various forms, including yogurt drinks, stirred yogurt, firm yogurt and frozen yogurt. Producing a total of 213.7 thousand tonnes of yogurt in 2004, demand for yogurt in Canada has been rising since 2001. Companies such as Danone Canada (30% market share), Ultima Foods Inc. (30.6% market share) and Parmalat Canada (20.5% market share) dominate the Canadian market, added together they produce 75 percent of total Canadian production.

Ice Cream
In 2004, total Canadian ice cream production (hard, soft and mix) was 455.4 million tonnes. Ice cream is produced in 61 plants across the country by 1557 workers. The main players in the industry are Nestlé (27.9% market share) and Unilever (22.8% market share). Overall, ice cream consumption is decreasing in Canada and as a result, producers must provide innovative products to encourage an increase in demand.

Deli
Deli Meats
Deli meats have been experiencing consistent growth in the last few years. Regular deli meats on average see four to six percent growth year-on-year. “Leaner” and “lighter” deli meats have experienced growth rates of ten percent, due to healthy living trends.

It is interesting to note that among luncheon meats described as “better-for-you,” dollar sales of those described as lean (90-94% fat free) experienced higher growth than those in the fat-free, light and low-fat categories.

Meat Sticks and Jerky
Recent trends, such as low carbohydrate diets and consumer interest in low fat snacks, are boosting consumer demand for meat snacks. In addition, due to the increased distribution channels of these products, meat sticks and snacks are forecasted to grow consistently over the next few years. The most popular meat snacks are Sticks (40%), beef jerky (32%), kippered meat products (21%), and pickled sausages (7%). With a sales growth of 32 percent in Canada in 2002, beef jerky was ranked the 6th fastest growing category in the Canadian grocery store.

68 Sector Profile: Whey June 2004, Agriculture and Agri-Food Canada
Bacon
In Canada there is a consumer trend towards buying more national brand name bacon, which grew eight percent, compared to private label bacon, which declined nine percent in the last year. Processing of bacon into fully cooked bacon strips and pieces has been one of the major growth areas of this category with a significant value added price increase for this added service.

Wiener
According to Information Resources Inc., supermarket sales in the USA of hot dogs were $1.8 billion. Eight-hundred and thirty-seven million packages of hot dogs were sold at USA retail stores in 2003, and 4.9 million pounds of hot dogs were sold to food service establishments in 2001. Any expansion of wiener at the retail counter will prove challenging given the prominence of national brands.

Sausage (Cooked, Fresh, and Summer Sausage)
Demand for sausage varies by season, with peaks occurring in the summer months. A growth trend has been observed in pre-packaged sausages (4% growth) and refrigerated dinner and breakfast sausages (13% growth). It is believed that the growth in these categories can be attributed to the ready-to-eat and pre-cooked convenience phenomenon.

Patties/Burgers
According to AC Nielsen, 2003 annual sales in the Canadian retail frozen dinner and entrée category were $1.4 billion CDN. The frozen boxed meat segment holds the largest portion of these sales at just over $495 million CDN. The frozen boxed meat segment is largely made up of burgers and medallion meats. Brand presentation is important in the refrigerated meat counter; with box branding considerations becoming crucial to product success.

Ready to Serve (RTS)
Ready to Serve refers to fully cooked, refrigerated protein entrées (beef, poultry, and pork) that arrive pre-packed from the manufacturing plant. The value added by manufacturers is to improve consumer satisfaction through added flavour profiles, and convenient packaging etc. The growth is attributed largely to time starved consumers as well as consumers that either do not have the skill and/or interest in preparing food.

The demand for prepared foods that taste as if they provide a restaurant-style eating experience – with consistent eating quality and flavours is growing. The competitive positioning of these products is that they taste homemade and that they only need to be heated for ten minutes in the microwave.

Confectionary
Firms in the confectionery industry compete on the basis of brand name, product advertising and promotion, specialty products, quality, and cost of production. Because confectionery products are usually discretionary and high-impulse purchases, promotion plays a substantial role in establishing brand-name presence in the various regional markets of Canada.
Sugar-free confectionery continues to be a fast growing market segment. Newly developed blended ingredients and sweetener systems are allowing manufacturers to easily produce a greater diversity of stable products. Synergy among many of these products has resulted in better taste and texture. Confectionery products, whether produced in Canada or imported, are subject to the Food and Drugs Act and Regulations, which are enforced by the Canadian Food Inspection Agency (CFIA). CFIA inspectors check to see that producers and packagers conform to very specific regulations about the labels on food products.

**Grocery**

The grocery category represents the largest retail space within the store and is typically considered to encompass all shelf stable items. While “commodity” based foods such as fruits, vegetables, bread, eggs, butter, milk, and meat are located at the perimeter of the retail grocery store, the internal aisles of the store carry what is generally considered “grocery”.

For the purposes of this report, we have identified the following items under the grocery category:

- Cooking and baking needs;
- Breakfast foods;
- Candy and chewing gum;
- Canned – fish and canned seafood, canned meat, canned milk, canned prepared foods (chilli), canned and dry soup;
- Canned and bottled vegetables;
- Condiments, dressings, spreads, pasta sauces;
- Desserts;
- Dried foods;
- Fats and shortenings;
- Preserves (jams/jellies) and syrups and spreads; and,
- Dry pasta.

The items listed above combine to represent approximately 18 percent of total food retail dollar sales (approximately $7 billion dollars in sales annually). The consolidation of numerous retail chains has been followed by the increased growth of large food processors that are able to support the volumes the large chains now require. Food manufacturers generating products for the grocery category include large national and multi-national conglomerates such as Proctor & Gamble, Kraft, Campbell’s, Nestle, Kellogg’s, Quaker, Pillsbury, and Green Giant.

This dominance of national chains has an upward impact on prices, since most chains employ centralized price setting. As well, the fact that few manufacturers produce products for this category would lead one to think that less competition would lead to pricing increases, however, this is not the case. One of the reasons is due to brand positioning and the impact of private label products in Canada. Private labels came into existence mainly as store brands that were positioned very low, often identified as “no name”. The emergence of premium private label brands has led to what is considered three tiered pricing: “no name” as the lowest quality, lowest priced product; medium pricing with quality brands at good value – usually justified due to economies of scale and carried by brand loyal customers (i.e. Heinz Ketchup); as well as premium brands and premium private label brands (i.e. President’s Choice). All of these brands work to offer a wide variety of price points to accommodate various consumer needs.

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Condiments and Sauces
In 2001, sales of sauces, dressings and condiments in Canada grew by 2.4 percent climbing to a total of $1,789 million. Sauce/Marinade category led sales with $189.8 million in 2002. Just less than half of the sales were in Oriental sauce alone ($62 million). Volume sales increased at a slower rate of 0.9 percent in 2001. Private label entrants put downward pressure on overall pricing.

U.S. sauces and condiments have benefited greatly from tariff elimination under the CFTA/NAFTA. Prior to NAFTA, these products were among the most highly taxed in Canada's tariff rate schedule. Specialty sauces are in demand by Canadian restaurants to satisfy consumer appetites for complements to nachos, tortillas and other corn-based snack foods. As well, consumers use sauces to speed their preparation and to enhance flavours that they would find very difficult to duplicate at home. This has led to the competitiveness of this category with many multi-national food processors competing for shelf space.

Entrée
The entrée category consists of both fresh and frozen formats and includes all products that have been further processed into meal solutions including pizza, hand held entrées, meal entrées, or multi portion entrée items. As mentioned, entrées may be fresh (ready to heat pizza) or frozen meals (television dinners). According to the Ag Exporter, frozen dinners are well-positioned to continue as one of the fastest growing and most dynamic food categories in Western Canada.

In 2002, Canadian ready meals’ sales reached $2,784 million and in 2003, sales increased by 7.1 percent to $2,982 million. The frozen pizza category was the biggest market segment with a 17 percent increase in 2003, and sales reaching $610 million. According to Sara Lee projections, home meal replacements (or HMR) will account for 80 percent of the North American food industry growth by 2005. Similarly, the NDP group stated that, “The biggest opportunity for the food industry lies in providing those who are skipping meals with convenient, portable and nutritional alternatives.”

The frozen entrée category consists of a large variety of products (over 1500 item choices) including pasta-based, meat and vegetable pies, quiche, etc. In 2001 sales reached $925 million in this category, a 13 percent increase from 2000, growth is expected to continue.

Due to the high capital investment required to compete within the entrée category, the barrier to entry in this market is quite high and consists of only a few, large multi-national players. In addition, entrées that include more than 5 percent meat (in proportion to the rest of ingredients) must be from CFIA approved plants. This makes it difficult for the smaller fruit and vegetable processors to capitalize on this emerging trend.

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Appendix 8 – Consumer Trends

Health

North Americans are taking unprecedented action in improving their health through the food that they consume. Shoppers want to know where their food comes from and the ingredients it possesses. A common underlying reason for this shift is a result of the aging population. As consumers get older, their desire to lead healthy and active lives is of an increasing importance to them. In fact, the majority of Canadians (76%) agree that there is an important link between what they eat and their health; and that diet is an important priority at any age (80% agree).

More than 43 percent of Canadians are currently attempting to lose weight, while another quarter has done so in the past. Almost two-thirds of Canadians report that they have been trying to eat healthier for more than six months. There has been an enormous shift to low-fat food items, particularly snacks and small indulgences. No Pudge! fat-free brownies have seen sale increases of 800 percent in 4 years – on trend with consumers desire to consume less fat.

Canada introduced mandatory nutrition labelling requirements for food on December, 12th 2002. The legislation requires manufacturers to identify the nutritional content of a specified service size, including the amount of trans fats in a product on its nutritional label, along with information on calories and other nutrients. A transitional period was instituted to give manufacturers time to comply. Smaller manufacturers were given more time to comply due to the cost of nutritional analysis and changes required to packaging. To help with the transitional costs, most manufacturers must comply by December, 12, 2005, however smaller manufacturers with gross revenues from food sales under 1 million dollars will not be required to comply until December, 12, 2007.72

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72 Canadian Food Inspection Agency. Regulatory Amendments of the Food and Drug Regulations (Nutrition Labelling, Nutrition Claims and Health Claims)
Innovative food companies are utilizing product development advances to produce trans fat free foods in typical high-fat categories such as cookies and crackers. Trans-fat free has become a marketing tool. The latest Health Canada report on Canadian eating patterns suggests that 52 percent of Canadians know how many fruits and vegetables they should eat on a daily basis. The same survey also found that 82 percent of Canadians are trying to do what they can to eat healthy which includes avoiding genetically modified foods and eating organic foods.

When it comes to meal planning, Canadians tend to make meals with taste in mind and healthiness second. Eighty-two percent of Canadians say they are doing what they can to plan and eat healthy meals. There is a substantial opportunity for tasty, easy, healthy meal alternatives. Four in ten meal planners agree that they would plan healthier meals if they had more time or energy to do so.

Convenience

Mobile products (those products that are prepared to be consumed on the go) will increase as the population becomes more time starved. As a result, food technologists and chefs will become more important if the industry is to remain competitive.

The traditional household composition and family structure is changing and it is having an effect on the Canadian food industry. Household size is, in general, decreasing as a result of fewer children or single-parent families. Other changes include a greater percentage of women are entering the workforce (2000-2004) demonstrated by a 10.2 percent increased presence of women in the labour force compared to men who displayed a 7 percent increase. The number of women 25-44 who hold part-time positions (2000-2004) decreased by 2.3%, this is assumed to be a result of more 25-44 women presently holding full-time positions (an increase of 2.2%). As the number of dual-career households’ increase, disposable income is higher and families can therefore spend more money on value added and quality food products.

- More than half of Canadian meals are planned the same day
- 58 percent – 64 percent of all meals are planned sometime during the day
- 10 percent – 25 percent of meals are planned on the way home from work or just before dinner
- 49 percent – 65 percent of Canadians get weekday dinners on the table in less than 45 minutes

All of the above-mentioned factors lead to an increased desire for convenience. Parents not only lack the time to cook home-made meals, but they also have many more leisure activities for which they need to accommodate. As a result, prepared foods and frozen entrées are gaining more and more market presence.

Items that can be consumed on-the-go are securing their position as staples on today’s consumers’ shopping lists. The convenience trend goes beyond dinner solutions. Consumers are also looking for products which are increasingly portable, for on-the-go eating which has blurred the traditional meal occasion eating patterns.

73 Statistics Canada, 2005 (http://www40.statcan.ca/101/cst01/labor05.htm)
74 Statistics Canada, 2005 (http://www40.statcan.ca/101/cst01/labor12.htm)
75 Key Consumer Attitudes in Canada
**Organic and Natural**

The Canadian introduction of retail chain giant, Whole Foods has solidified an industry commitment to healthy eating alternatives. There is increasing interest for food grown under a production system that prohibits the use of synthetic chemicals, and also promotes soil health, biodiversity, low stress treatment of animals and sound environmental practices. Although the natural and organic market represents a fraction of overall food spending, the market is growing at a rate of 20 percent annually and will represent, some experts say, the largest potential for growth in retail in the upcoming years.

Eighty-nine percent of consumers are aware of the term organic, but only 47 percent understand it completely. Most consumers believe that organic products contribute to overall health, rather than being associating with any specific health benefit (see chart right).

Sixty-four percent of Canadians believe that organic foods are safer and healthier than regular foods.

In Canada, however, there are limited protein players currently dabbling in this market, although other categories are experiencing huge returns. Meat and poultry has yet to secure a lucrative position within this market for good reason:

- The CFIA has recently restricted the use of marketing the term “natural” for meat and poultry; and
- Production of Organic meat and poultry has been identified as more costly to produce and certify (typically 2-3 times more expensive).

Products claiming attributes including “no antibiotics”, “no hormones” and “100% vegetarian feed” do not command the same price premiums as those labelled as organic, as they are not geared towards the certification aspect of the product, but rather promise a specific product deliverable. These products also do not carry as high a price premium as their certified counterparts have, so they are more affordable, generally commanding a 10-20 percent premium. In 2001, Statistics Canada reported that the majority of Canadians are willing to spend more for chemical-free food, and 25 percent would spend up to 50 percent more.

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Table 1 - Current and Projected Sales of Organic Food in Canada\(^1\)

<table>
<thead>
<tr>
<th>Sales (in $ millions CDN)</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy</td>
<td>64</td>
<td>79</td>
<td>97</td>
<td>120</td>
<td>147</td>
<td>181</td>
<td>217</td>
<td>261</td>
<td>313</td>
<td>375</td>
<td>450</td>
</tr>
<tr>
<td>Bread &amp; Grains</td>
<td>94</td>
<td>114</td>
<td>139</td>
<td>170</td>
<td>207</td>
<td>253</td>
<td>294</td>
<td>341</td>
<td>395</td>
<td>458</td>
<td>532</td>
</tr>
<tr>
<td>Beverages</td>
<td>110</td>
<td>131</td>
<td>155</td>
<td>185</td>
<td>220</td>
<td>262</td>
<td>301</td>
<td>346</td>
<td>398</td>
<td>458</td>
<td>527</td>
</tr>
<tr>
<td>Snack Foods</td>
<td>17</td>
<td>21</td>
<td>25</td>
<td>31</td>
<td>38</td>
<td>46</td>
<td>55</td>
<td>66</td>
<td>79</td>
<td>95</td>
<td>114</td>
</tr>
<tr>
<td>Packaged/Prepared Foods</td>
<td>78</td>
<td>96</td>
<td>119</td>
<td>148</td>
<td>184</td>
<td>228</td>
<td>278</td>
<td>339</td>
<td>413</td>
<td>504</td>
<td>615</td>
</tr>
<tr>
<td>Condiments</td>
<td>12</td>
<td>15</td>
<td>18</td>
<td>23</td>
<td>28</td>
<td>35</td>
<td>41</td>
<td>47</td>
<td>54</td>
<td>62</td>
<td>71</td>
</tr>
<tr>
<td>Fruit &amp; Vegetables</td>
<td>269</td>
<td>313</td>
<td>363</td>
<td>421</td>
<td>488</td>
<td>566</td>
<td>651</td>
<td>748</td>
<td>861</td>
<td>990</td>
<td>1138</td>
</tr>
<tr>
<td>Meat, fish, poultry</td>
<td>8</td>
<td>9</td>
<td>11</td>
<td>12</td>
<td>14</td>
<td>17</td>
<td>22</td>
<td>27</td>
<td>35</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>651</td>
<td>777</td>
<td>928</td>
<td>1109</td>
<td>1327</td>
<td>1588</td>
<td>1858</td>
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**Speed Scratch**

The speed scratch phenomenon is a growing segment that helps create flavours and tastes that are not easily duplicated by combining pre-made key ingredients into a complete meal. The trend is targeted at consumers who wish to participate minimally in food preparation by combining and heating food without extensive preparation. This is true for many desired dishes from a home-cooked taste to international flavours. The need for convenience encompasses not only the lack of time and energy that consumers have, but also their lack of interest and/or skill to create even traditional meals. The speed scratch phenomenon is an emerging segment of the home meal replacement market that helps create flavours and tastes that are not easily duplicated by combining pre-made key ingredients into a complete meal. The trend is targeted at consumers who wish to participate minimally in food preparation by adding key ingredients.

**Trends driving the Speed Scratch evolution:**

1. Today, when people choose to eat at home it is more likely that at least part of the food has been prepared by someone else
2. Attempt to duplicate tastes from favourite restaurants – original flavour and taste sensations desired
3. Families still want to eat meals together, they just don’t want to spend a lot of time cooking (Cooking at home is an inconvenience – Longer work weeks leave less time for shopping, cooking, and clean-up)
4. Changing role of women leaves less time for cooking, but a need for fresh, healthy meals prevails (A century ago, domestic labour took the equivalent of a full work week - 44 hours spent preparing meals and cleaning up after them)
5. Hurried households seek ways to reduce preparation time

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According to Sara Lee projections, home meal replacements (HMR) will account for as much as 80 percent of the food industry growth by 2005. The same source also predicts that by 2005, many North Americans will have never cooked a meal from scratch. Pillsbury even offers ready-to-eat brownie trays that are placed directly in the oven. The home meal replacement category at retail attempts to take back some of the food dollar being spent at food service and provide consumers with the ability to purchase a meal that is already heated or just requires heating at home.

**Ingredient**

The ingredient category is a sub-component of the speed scratch category phenomenon. The ingredient category encompasses basic cooking and baking food items to form a product to be used as part of a recipe or meal. For many consumers however, prepared sauces and marinades are becoming an “ingredient” to be added to meat or pasta.

**Microwave**

The microwave has moved from a vehicle that defrosts foods to be prepared into a meal to a means of finishing prepared foods for immediate consumption. The trend to microwave dinner items has evolved from a market dominated by television dinners, to sophisticated meal items rooted in today’s speed scratch and ready to serve categories. Product development advances have created an innovative assortment of products that have improved the microwave’s stereotype as well as the bottom lines of companies willing to invest in R&D and technology.

One of the most predominant aspects driving the microwave trend is the desire for convenience and includes trends such as ready to eat foods, one dish meals, mobile foods, snacks and mini meals. The ability of food processors to meet consumer needs has been achieved by the use of the microwave. A total of 93 percent of Canadian households owned a microwave oven in 2003, an increase over previous years. With the ability to cook becoming a unique skill for consumers, one would predict that the microwave is becoming one of the most used appliances in consumers’ kitchens.

**Frozen**

The increased demand for the frozen category is seen as a result of various factors, mostly related to a changing population and current lifestyle characteristics. The increased presence of women in the workforce is creating a greater reliance on frozen entrées as women prepare an average of 84 percent of evening meal consumed at home. The increase in dual-income households is increasing the amount of disposable income while decreasing time available for meal preparation – estimated at only 6 percent of a day’s activities. Frozen entrées therefore allow for a fast and tasty meal while still providing time for all other required daily activities. The smaller portion sizes offered with frozen entrées also cater to the decreasing household size.

Opportunities exist in this category for new manufacturers since growth is expected to continue to increase. Packaging of frozen products is a key concern for storage as freshness and quality of the product are essential. Manufacturers benefit from their ability to mass produce frozen entrées and store them unlike fresh products which must be transported promptly to ensure their value. Unfortunately, this excess storage can lead to considerable extra costs to the product.

81 [http://www40.statcan.ca/l01/cst01/famil09b.htm?ssi=microwave](http://www40.statcan.ca/l01/cst01/famil09b.htm?ssi=microwave)


### An Overview of Frozen Food Manufacturers in Canada

<table>
<thead>
<tr>
<th>Company</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Morrison Lamothe Inc.**                    | 3 plants in Toronto  
Joint venture of four leading frozen prepared food manufacturers  
Supplier to Loblaws  
50 million + total sales  
1 to 5 million export sales  
Dinners, meat, pre-cooked, meat-pies, frozen fruit pies, dinners pre-cooked, frozen, frozen prepared appetizers, frozen entrées, protein, pasta |
| **Midwest Food Production - Manitoba**       | Producers of frozen and dehydrated specialty potato produces  
Supplier to McDonalds  
50 million plus total sales  
50 million plus export sales  
450 employees                                                  |
Number of Frozen Food Manufacturing Establishments by Province

Number of Establishments in Canada by Type and Region
Frozen Food Manufacturing (NAICS 31141)
December 2003

<table>
<thead>
<tr>
<th>Province or Territory</th>
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<th>Non-Employers/Indeterminate</th>
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<th>% of Canada *</th>
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</tr>
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<td>3</td>
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</tr>
<tr>
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<td>Nova Scotia</td>
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<td>CANADA</td>
<td>160</td>
<td>54</td>
<td>214</td>
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Percent Distribution * 74.8% 25.2% 100%

Fresh/Traditional

Consumer trends have been moving towards fresher, gourmet meals, as a result carry-out meals from grocers are increasingly being chosen over frozen alternatives. Fresh, chilled, and ready made foods are second only to sauces in growth. Fresh or chilled meals offer convenience and the perception of a gourmet meal that is fresher and healthier than its frozen counterpart. Consumers have often reported that frozen foods often lack flavour and are increasingly switching to fresh foods that they perceive as being tastier, healthier, and more nutritious. A Manitoba survey reported that after cost, consumers reported freshness and appearance as the most important factors in food purchasing decisions. While the demand for fresh foods is increasing, it is still equally important that preparation is convenient. Canadians generally like to fill up their freezers but as convenience becomes even more of a driver, frozen convenience is being pressed out by picking up fresh meal solutions on the way home from work.

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84 The Hartman Group, Top Ten Food Trends 2005
The taste and quality that is related to freshness is another factor that leads consumers to desire fresh products. A 2000 study concluded that Canadians were willing to pay 20 percent more for fresh bread and sales increased by 10 percent in 2003. In a survey by Market Facts, Inc., 70 percent of 1,000 consumers said they were more likely to order desserts described as freshly made or homemade. Another survey by Northstar Interviewing Service, found that 87 percent of restaurant operators confirmed that their customers hone in on those key words.

**New Product**

According to Stats Can Daily, a survey on companies in the food processing industry showed that businesses that introduce product innovations tend to reap the economic benefits. The study, executed on behalf of Agriculture and Agri-Food Canada, found that more than one-third (37%) of surveyed establishments had product innovations within the last three years; and that the margins on their innovative products were higher than the margins on their traditional products.

The addition of women to the workforce has led to an increased demand for prepared foods and food prepared outside the home. The illusion of a prepared “family” meal has increased the bottom line of several food industry players whose products consumers feel comfortable serving to their families. Women want to cook from scratch, but simply lack the time to do so.

As Canadians become more time starved, companies that can offer complete meal solutions will reap the benefits. Category leader, Retail Food Brands with their line of 44th Street fully cooked proteins saw the entrance of TMF’s Lou’s BBQ line as well as industry giant Maple Leaf. These are excellent examples of research and development innovations that have been so successful that they have created their own category – microwaveable roasts.

The average household size is smaller than ever before due to an influx of single-person and one-parent households with fewer children. As a result, meal solution, portion sizes, and marketing efforts within the meat and poultry category will need to catch up to the times. This includes smaller portion sizes; more value added pre-marinated/pre-cooked and meal solution ideas.

**Functional Foods and Nutraceuticals**

Functional foods are conventional foods that have had healthy ingredients added to them that go beyond regular nutritional functions. Examples of functional foods include probiotic yogurts (added bacteria cultures to promote health in the gastrointestinal tract); omega fortified eggs, and beverages with added vitamins and minerals. The market for functional foods is big and growing, as more and more people are beginning to see the benefits of making small changes to their diets.

Currently, 93 percent of consumers believe that the health benefits of some foods go beyond nutrition to disease prevention, and just under two-thirds of consumers have used a functional food product. The market is expected to experience significant growth in the future as consumers gain a better understanding of the relationship between diet and health, and as the aging population increasingly turns to preventive health initiatives. The market is growing worldwide, and is predicted to grow by 33 percent by the year 2009. Large-multi-national firms are wasting no time in developing their

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89 Top 10 Functional Food Trends 2004
90 Confectionery Manufacturers Association of Canada: Mars Makes a Leap into Functional Foods, July 5, 2005
products into functional foods. Mars has already launched an 80 calorie chocolate bar called Cocoa Via with added heart-healthy ingredients, and Becel has changed their packaging to let consumers know it contains omega-3 polyunsaturated fats, even though it always has.

Asia is well known for its focus on functional foods while Canada has been striving to catch up by addressing food regulations to allow domestic manufacturers to compete in this marketplace. Large-multi-national firms are wasting no time in developing their products into functional foods.

**Multicultural Cuisine**

The ever-changing dynamics of the Canadian population significantly affect the Canadian food processing industry. This has been accomplished through a variety of factors including an increase in minority presence, changes in household composition, alterations of workforce composition, as well as a greater emphasis on health and well-being among Canadians.\(^91\)

As the level of immigration into Canada continues to escalate, the degree of multiculturalism present within Canadian borders is becoming more visible and is beginning to influence the marketplace. The demand for authentic cultural cuisine and ingredients is visible in many large metropolitan cities due to increased exposure to new flavours and dishes. These ethnic dishes are becoming more common and offer great potential to reach new markets for retailers.

The multicultural market in Canada’s food industry is currently valued at approximately $8.75 billion with 65-80 percent sold through the food service sector. Food service sales generally account for 35 percent of overall food industry sales. This is a testament to multicultural foods as an ‘experience’ food. Also driving the movement is the large influx of immigrants’ integration into Canadian society, increasing the general population’s exposure to multicultural food.

In 2004, 44 percent of immigrants into Canada settled in the city of Toronto. This presents retailers and food service operators with a variety of new sales opportunities geared to the multicultural markets and religious influences including Islam and Moslem Halal products and kosher products for Jewish consumers.

Interestingly, while first generation immigrants have the skills and ability to create traditional flavours, second and third generation families face many of the same challenges as the rest of the population. Less time and loss of cooking knowledge lead them to look for easier meal solutions that have authentic flavours.

\(^{91}\) AgExporter August 2002
Appendix 9—Customer Trends

Customer Consolidation
The trend toward consolidation has affected the retail industry substantially resulting in a spiral
effect throughout the industry, from supply management to food processing and packaging, how the
products are delivered within the distribution systems, through to retail sales at the store level. All
links within the food chain are becoming more concentrated especially in the retail and processing
industries. Although numerous studies have been executed surrounding this issue, the debate
continues as to whether this concentration is leading to an actual exercise of market power.

The Canadian retail environment is comprised of several large national retail chain banners that are
increasingly categorized by consolidation. The two largest retailers in Canada have grown considerably
with several high-profile acquisitions. The retail giants - National Grocers (Loblaws Companies) and
Sobeys' - are the top two grocers in Canada and are the only national players (with the exception of
B.C.). Beyond that, there are a few strong regional retailers; A&P in Ontario (most recently purchased
by Metro in Quebec) and Sav-On Foods and Safeway in B.C. and Alberta plus, Co-Op in the West
and only one remaining Quebec-based independent retailer: Metro-Richelieu. In total, sales in the
Canadian retail industry were approximately $37.8 billion dollars in 2003.

This type of consolidation has directed the needs of the retailer to source food from larger processors
that can supply the volumes demanded for their chain, and multi-chain stores.

Similarly, Canada has experienced considerable consolidation in the food service industry. The food
service industry is divided into commercial and non-commercial sales. Commercial sales include
food service restaurant and hotel operations while institutions (i.e. prisons, work place, schools) and
hospitals are considered non-commercial. Commercial sales make up the majority (72%) of the
$45 billion dollars in sales that the food industry in Canada represents. The commercial business
is becoming extremely consolidated with restaurant chains considerably surpassing independent
restaurant business.

These customer trends have put pressure on food processors to address their specific needs. For
example, as we are seeing an increase in value added products at retail due to the demands of
consumer's busy lifestyles, there is a substantial need for value added products in food service. This is
largely due to the fact that there is a general lack of labour available in the food service industry, and
in particular skilled labour. Without the preparation knowledge, food service operations require food
items that are pre-portioned and can easily be prepared with little food preparation knowledge.

In terms of product development, food processors need to take into consideration that products must
be easily reheated on equipment that exists within the food service operation. Packaging equipment
must be able to seal individual portions so that food service staff can take out the correct portions
required and easily re-heat them.

Considerations for the food processor include packaging equipment that can handle individually
quick frozen items.

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92 Canadian Food and Restaurant Association, 2002
Shelf Life
One of the most critical aspects of a product's success at retail is its ability to ensure and maintain product quality through the distribution system. The location of a food processing facility must consider shipping times to distribution channels and storage facilities. The greater the distance a product must travel means greater shelf life requirements are required.

Furthermore, as fuel prices continue to escalate transportation companies will increase efforts to consolidate orders resulting in maximum loads and fewer deliveries. This may impact food processors as perishable items may be loaded for delivery, but are not en route until the delivery vehicle is full. Retailers are looking for maximum shelf life that allows them to market the product with the least amount of product maintenance. Products that have expired code dates must be returned to the processor which results in time and effort on the retail side. These additional costs are directly attributed back to the processor.

Warehousing
The consolidation of retail has advanced the industry to manage its own inventories. This is done through substantial warehouses that store thousands of different product SKUs (product identification bar codes). The space that the products demand as well as the product maintenance in terms of maintaining proper product temperature for food safety is an added cost to food processors. As well, this complicates the distribution system and adds another level of costs, specifically to small and medium sized processors.

Unlike the larger retailers that have created their own warehousing system to control inventories, the structure of food service is more of receiving product “just in time”. That is, a food service operator has limited space to receive product so by having a distributor that can make more frequent deliveries with the right amount of product on a consistent basis, is very valuable. Food service operations do not have the space for extra inventory, but it is also costly for them to carry large inventories. The cost saving for chains comes from negotiating contracts on volume amounts and then arranging suitable delivery of product for their chain outlets.

The low margin business of food service has meant that food processors have had to become extremely efficient on the processing side. Larger processors are able to reap benefits from economies of scale and their ability to afford technology to make processing more streamlined. This, in turn, requires a higher skill level in terms of labour.

Buyer’s Group
A result of the retail consolidation is the ability for larger players to obtain larger supply at cheaper costs through economies of scale. In order to compete, retailers are forming buyer’s groups to allow smaller chains and independent retailers to obtain larger volume contracts from food processors. Often these buyer's groups require DSD (Direct Service Delivery) which could be satisfied by the food processor having a transportation fleet or by distributors and brokers managing the products on behalf of the buying group. This mechanism has put added pressure to serve larger orders and keep pricing competitive.
As mentioned previously, consolidation in the food service industry has led to consolidation in the distribution sector. These larger distributors have become so powerful by being able to lock in larger contracts with chains that the independent restaurateur has suffered. To compete, independent restaurants are forming buying groups much like smaller retailer chains have. These buying groups allow for larger volume purchasing as well as more power to command more specialized products at better prices. Like retail, shelf life and food safety are major issues when sourcing products. While food service is better suited to accommodate frozen products, the inventory control in-house as well as inventory management of the distributors puts pressure on the food processor to deliver products that move through the system quickly.

**Multi Programs**

The term “programs” relates to support programs which are intended to drive volumes and profit expectations at retail. Retail consolidation has led to another shift in the role of the retailer. In the past, smaller retailers were not as involved in the promotional aspects of the foods they carried. Food manufacturers were more directly connected to the gatekeeper, or food shopper, with their promotion and marketing programs as well as their sales forces. Retailers are now the main contact the consumers have with the food products they purchase. In taking on this role, the retailer has developed programs that they require to support the products that they sell to consumers.

This may include incentive programs such as bill back programs. These programs are tied into “rewards” for selling an agreed upon volume of product within a specified time frame. For example, a retailer may have a budget of 1000 cases for the year. If the 1000 cases are sold, he would bill back the processor an agreed upon amount, such as one dollar per case for meeting quota. This type of incentive is directly related to the fact that retailers sell space; if they are able to move a certain volume of product within a time frame, then they are more profitable. This, in turn, is profitable for the processor as well.

“Off-invoice” programs are designed to pay for promotional activities and are typically tied directly to a deduction made on a per case basis. As the retailer takes on more promotion responsibilities, they require every food product to contribute to their promotional efforts which often include in-store merchandising as well as store flyers.

Listing fees are another expense that retailers have tied into the cost of getting a product on shelf. Listing fees are required from food processors by the retailer to list their product in store. If you liken the retail store to real estate, each “category” within the retailer is typically set up as its own cost centre with space to “sell”. Each category manager requests a certain amount to cover labour costs, equipment costs (coolers, freezers, slicers, etc.), warehouse/storage, merchandising and stocking. Each cost centre adds a certain margin onto the product to cover these costs as well as a listing fee which often includes some promotional aspects such as features in the flyers or other in-store promotions. Listings also entitle consistent customers some leverage in terms of space as they consistently keep existing and new products coming into the retailer.

These programs, while there are advantages and disadvantages, are helpful for food processors in terms of helping to secure volume sales and product movement. This is important considering the cost of having a product’s shelf life expire. The faster the product is moved through the system, the better it is for both the food processor as well as the retailer. If a product expires before being sold, the retailer charges this loss back to the processor.
Food service also participates in incentive programs to support faster movement of product, mainly through distributors. Food processors that do not own sales forces often use brokers who charge a fee to sell and distribute their product. This type of program adds costs to the system and puts pressure on the food processor to be more efficient in production in order to compete.

**Product Launches**

Beyond retail programs to manage getting the product on the shelf and available to the consumer, there are also costs to launch products. New products are an extremely risky venture for a processor due to the fact that 95 percent of new products fail, but products represent the major growth in sales at retail.93

The cost of launching a new product can be substantial in terms of the back-end costs of marketing and promotion which often include advertising as well as point of sale (POS) materials. However, organizing product launches can be very complex to the internal operations of the food processor. Considering that being a product leader can impact sales, food processors have to balance the production capabilities of the plant to accommodate new product development. Plant trials and product sourcing can take a considerable amount of time away from actual production time.

Accessing product development expertise is one of the major challenges across many food processing sectors. Product development and food science expertise includes food safety and product costing knowledge as well as the ability to coordinate and lead projects. Product development requires the contribution of several divisions including operations, accounting, marketing as well as senior management to support the somewhat risky business of launching a new product. In today's environment, food processors focus on increasing capacity versus trying to build a new facility or purchase new equipment. New technology is recognized as helping with product advancement; however, the cost and skill required operating and working with the equipment all need to be carefully weighted when determining return on investment.

**Globalization**

The introduction of the World Trade Organization (WTO), the Canada - United States Trade Agreement (CUSTA), and the North American Free Trade Agreement (NAFTA) has increased the opportunity for Canadian food processors looking to export. However, competing successfully with these foreign counterparts requires a commitment to technology, research and development, cost reduction, and efficiency.

As export opportunities increase, so does the competition from imported products. As a result of global competition, firms must now strive to be cost competitive and innovative, largely through the pursuit and commitment to technological change. Furthermore, reaching plant economies of scale and scope have become critical to compete with foreign-based multinationals.

Globalization of the food processing industry in Canada has been stimulated to a great degree by the formation of trade agreements within North America and internationally. Since the introduction of agreements such as NAFTA, CUSTA and WTO, Canadian exports have increased dramatically. Currently, 77 percent of Canadian exports are sold to the US. Other top export destinations are Hong Kong, Japan, Belgium and the UK.94

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93 New Product Trends, Information Resources Inc., 2001
94 Meeting the Challenge: Canada's Seafood Processing Industry Market in the 21st Century, 2004
As a result of the considerable increased trade with the United States, Canada Customs has updated its technologies to allow for faster processing of goods and less traffic at border crossing locations. Regular shippers can now even arrange for pre-clearance of their deliveries using Automatic Vehicle Identification (AVI) which allows trucks to pass through without having to actually stop for inspection.95

International trade not only allows for increased access to foreign markets, but also has a strong impact on those at home. Domestic producers must place emphasis on efficiency and production technology in order to maintain their competitiveness with foreign imports. The influx of foreign products has made the Canadian market reassess its production, quality, food safety and marketing efforts in order to better compete on a global market.

Larger food processors in the U.S. employ much more automation than Canada, so Canadian companies need to increase their level of automation and technical expertise in order to compete. This is of more concern since NAFTA, CUSTA, and WTO since trade is much more prevalent. Automation would allow for a smaller-scale work force, yet the level of education would need to increase over that of current food processing workers. Increased automation would reduce the dramatic fluctuations in seasonality of the workforce.

Producers in Asia and some Latin countries are able to efficiently produce products cheaper than here in Canada due to low product wages and benefits. This is very common in food and seafood industry. It is so economical for this to occur that some Canadian companies send their raw materials to China and then the products are shipped back to Canada for retailing. Technological developments were necessary in order to properly benefit from market opportunities. The increased transport of raw fish products to Asia required improved storage and freezing methods to ensure the quality of the product.

The bakery industry is characterized by domestic sales; exports have significantly increased through the 1990s as a result of decreased trade barriers. The trade of bakery products requires efficient distribution as the industry must carefully manage issues of perishability. The removal of trade barriers has allowed the bakery industry to really promote their par-bake items. These products, sold frozen and ready to heat and serve, do not possess the same distribution issues associated with traditional fresh bakery items.96

Increased export has led to the establishment of more regional distribution centers. These head office locations are making the buying decisions for major retailers and therefore the ability to sell locally has become more difficult for producers.97 A reality of globalization is the need and desire to create maximum profitability. In some cases this leads to a better selection of Canadian products in foreign markets than at home.

Factors such as changes in domestic and foreign demand and decreased trade barriers have led to the consolidation of many food processing plants in order to remain globally competitive by specializing in certain areas. The early 1990s saw a decrease in the number of processing plants in Canada of 11 percent. The larger, but fewer, firms are able to better take advantage of economies of scale than if the companies were operating as smaller operations.98

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96 Quebec Bakery Industry Outlook
97 www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/sis9417
In order to best compete in global markets, some farmers are beginning to alter their product selection to those which hold the best competitive advantage and market potential. Concentration on niche market products can allow for increased profitability.  

The loosening of trade barriers and an increase in immigration has the drive towards the variety of products produced by the Canadian food industry directed for international and domestic distribution.

The abundant level of Asian immigration has been a driving force away from consumption of sugar, butter and lard, red meat, eggs, canned vegetables towards an increase in foods such as rice, cereals, nuts and fresh vegetables.

The pattern of providing a more value added product is becoming important to the food processing industry. This is an outcome of technological increases and changes in population dynamics. The introduction of private label brands is another mechanism that retailers are using to compete in the global marketplace.

Appendix 10 – Facility Considerations

Reduced Product Runs

The introduction of private label products as a major force at the retail level has reduced the amount of product runs at food processing facilities. Private label sales in Canada are growing at an enormous rate while the breadth of products available is also increasing. The current retail environment is categorized largely by the Power of Three phenomenon. The Power of Three refers to the presence of a national leader, middle of the road brand, and a private label brand for most products on retail shelves. This phenomenon has forced middle of the road brands to constantly innovate in an effort to compete with the national brands, and the lower priced private label offerings.

The pressure on non-leaders to innovate more at the product level equates to different product runs that are smaller in size as well as shorter product life cycles. In addition, customers are demanding products that are customized to meet their stores’ needs. This includes regular testing of new concepts and offerings, plus a constant search for potential partners – both branded and unbranded. Within the generally static markets, the focus has shifted to stealing share from a competitor and expansion into new categories. Many of the value added categories (pharmaceutical, take-out, etc.) are labour intensive and/or demand specialized knowledge, creating a staffing issue. Plus, the extended opening hours demanded by convenience-hungry consumers add to staffing concerns.

Customer requirements for just-in-time inventory have also resulted in reduced product runs at the manufacturing level. This reduction in inventory allows customers to better manage accounts payable as well as reduce storage costs at the store level, for both the retail and food service sectors.

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99 BC Stats, January 2000
100 An Analysis of Profits within the Canadian Food Processing Sector
102 The Food Marketing & Distribution Sector in Canada, April 1999
103 “Creating Growth Beyond Expectations”, Canadian Council of Grocery Distributors (CCGD) and the Food and Consumer Products Manufacturers of Canada (FCPMC), and prepared by ACNielsen TORONTO, ON, September 14, 2001
Regarding efficiency in product runs, seasonality is a major issue in the produce and seafood marketplace in relation to packaging innovations and customer needs. The short season does not generally give a ROI for the investment and other cost control initiatives must be undertaken.

Processing sectors may experience predictable and unpredictable peak periods of activity due to climate, resulting in seasonal employment patterns, and the need for temporary workers. Seasonal industries are normally able to predict the number of workers they will need to retain and hire when seasonality is the only factor, but finding temporary and seasonal workers with the right skills and dealing with regulatory and technological changes poses a larger problem. Sectors may also find themselves in situations when their activity is unpredictable due to external economic factors resulting in unforeseeable labour shortages and surpluses. For example, an industry may also find itself in an unforeseen event such as the breakout of BSE in the beef industry leading to decreased demand for exported products, and an immediate need to change industry practices. Increased periods of production may also differ between small, medium, and large enterprises. For example small enterprises operating primary processing facilities may only operate at peak periods, while larger enterprises may have the resources to operate year-round.

Seasonal workers surveyed in the Quebec fruit and vegetable processing industry reported the most dissatisfaction with wage rates, and length of leave from work. Workers who are male, under the age of 30, and working the night shift in sanitation tended to be the least satisfied. Workers reported the highest levels of satisfaction with job relations, and, health and safety.104

**Increased Variability of Products and Costing Standards**

Reduced product runs and shorter product cycles require target costing (such as activity based costing) and the ability to least cost formulate based on inputs not efficiencies gained from large product runs. Long product runs used to be executed Monday to Friday, using the same processes.

Design processes that allow for efficiencies of design such as tray pack entrées substituting key ingredients like chicken for beef, allow manufacturers to gain efficiencies where shorter product runs exist. These economies can only be realized where one ingredient or component is added the same way.

Cost conscious manufacturers have begun to design products around the processes available within their plants. This practice allows manufacturers to operate with the efficiencies of longer runs and fewer products.

**Cost of Labour**

The food processing industry in Canada is known for high turnover when compared to other manufacturing industries. High rates of turnover result in yield and cost inefficiencies at the expense of the manufacturer. The implementation of training programs in the food processing industry is thus sometimes disregarded as high turnover rates reduce the return on such an investment.

**HACCP Standards**

HACCP or Hazard Analysis Critical Control Points systems are food safety programs recognized globally as the recommended approach to assure food safety. Hazard analysis determines where significant biological, chemical, and physical hazards occur within a food production process and describes preventive measures that companies may follow to minimize the impact of these hazards.

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104 Analyse des besoins en main-d’oeuvre saisonniere dans les entreprises de transformation et de mise en conserve de fruits et legumes (conserves), Groupe AGÉCO, March 2005
Any HACCP system has two components: HACCP plans (based on hazard analysis) and Prerequisite Programs (universal steps or procedures that control the operational conditions within a food establishment allowing for environmental conditions that are favourable to the production of safe food including sanitation, pest control, interior and exterior premises maintenance, etc.). The key element of a HACCP system is its preventative nature with an emphasis on exercising better control along the manufacturing process, at critical steps called Critical Control Points (CCPs). By doing so, defects which could impact on the safety of food can be readily detected and corrected at specific points in the manufacturing process instead of relying on end product inspection and testing. Applying prerequisite programs and HACCP plans can better control hazards and thus provide a higher and more consistent assurance of food safety.

There are different HACCP systems worldwide but all are based on the same principals and are designed to deliver the same food safety assurances. In Canada, there are two different programs for federal facilities - the Food Safety Enhancement Program and the Quality Management Program (for fish processors). In Ontario, a unique approach to HACCP has been devised called the “HACCP Advantage”. The HACCP Advantage has been developed for non-federal food processors of all types. HACCP systems apply to, and can be adapted for, all types of food production, as has been done in Ontario.

Implementing, achieving recognition or certification of, and maintaining a HACCP system is increasingly becoming a requirement for food processors of all types and sizes. In Canada, HACCP recognition is now mandatory for all federally registered meat facilities. Other jurisdictions such as the United States require that any Canadian facilities eligible to export be HACCP recognized. Major retail chains are also generally only accepting higher risk products (such as meat and meat products) from federal, HACCP-recognized facilities or from facilities with recognized or certified HACCP systems. HACCP systems will continue to be required more and more around the world by legislation and regulation, and pressure from retailers, distributors, foodservice, consumers, etc.

New HACCP needs have caused problems for processors with regards to product flow and operations – plant and product would move in relation to cost efficiencies now food safe first.

**Multicultural Labour Force**

As the food processing labour pool in Canada increasingly sources from the immigrant population, training needs and orientation programs become increasingly critical. The prevalence of English as a second language means training documentation and other communication material must be available in other languages.

Basic communication on the floor will be imperative, placing new demands on the facility foreman and other plant management. Supervisors, managers and floor workers may come from different cultures; in addition English may not be the first language of some. For instance, implementing new food safety protocols and instructions need to be taught to employees. Other related norms that were not issues 20 years ago must now be revisited and addressed. Additionally, issues including sanitation and hygiene vary among cultures.

**Facility Standards – CFIA Approval**

The food processing industry in Canada is dominated by older facilities that require costly upgrades. Facility maintenance and building changes are costly and although full repairs may require a shut down, perishable food items prohibit this. As a result, band-aid repairs have caused facilities to become outdated and inefficient.
Facilities need CFIA approval to increase product offerings but have no ability to achieve it. More than 5% protein in an entrée needs federal approval in order to be manufactured. Furthermore, out of date technology decreases the efficiency of organizations and thus their ability to remain competitive in the marketplace. However, technological and facility upgrades are costly; but the alternative is to remain less competitive and perhaps resultantly less profitable.

Packaging Needs
As smaller runs begin to define the industry, the diverse range of products requires new and diverse packaging. New packaging increases inventory needs which directly equates to more cost at the manufacturing level.

Package costs, in relation to label approval costs and printing costs, are large in relation to the product life cycle. The Canadian Food Inspection Agency has strict guidelines pertaining to required nutritional information as well as labelling and advertising claims. Approval to market a claim may be time consuming as well as expensive. Similarly the printing costs of packages, especially those with colour graphics are cost prohibitive and the product life cycle may be too short to realize economies of scale.

Private label package development is at the whim of the customer and could prove costly as the product life cycle is generally shorter in private label. Customers are able to demand whichever packaging trend they feel their consumers will purchase. For example, inverted squeeze bottles are becoming one of the most widely implemented package designs of the moment, but it is unknown how long this trend will last. The investment must be made however to answer the need of the customer who demands this packaging right now. Additionally, they want packaging that is easy to read, open and that is re-sealable.

Storage and Distribution
Smaller product runs and more product SKU’s have placed pressure on warehouse slots and rotation. Managing over code date products cost a significant amount of resources.

Major customers require just-in-time inventory (JIT) delivery to their warehouses with specified delivery appointments. Inventory management is a major pressure on manufacturers as retailers have so many deliveries and appointments to manage. Product forecasting becomes increasingly critical to food manufacturers as they need to produce volumes to match the inventory schedules of major customers.

Larger direct to warehouse shipments have replaced direct-to-store delivery (DSD). The cost of distribution has changed from an asset based cost (where manufacturers own trucks) to a variable cost (where manufacturers have to pay for transportation).

Workforce Management
As the food processing industry becomes an increasingly complex environment, managing the industry’s workforce becomes a challenge – See Appendix 13.

Appendix 11 – Interview Demographics

In an effort to receive the most accurate and honest information from our interviewees, we pledged that all answers would be reported in aggregate and no particular firm’s name would appear in our report.

For the purpose of representing a diverse range of food processors, we segregated our interviews by firm size, sector, and geographical location. We have defined small, medium, and large firms by annual sales:

Small Processors - $5 million – $20 million
Medium Processors - $21 million - $100 million
Large Processors - $101 million and greater

Interview Statistics – Firm Size

Total small sized firms interviewed - 5
Total medium sized firms interviewed - 4
Total large sized firms interviewed - 4

Interview Statistics – Food Industry Sector

Bakery – 3
Dairy - 1
Meat and Poultry Processing – 3
Seafood and Fish Processing – 1
Sugar and Confectionary - 2
Private Label/Retail - 1
Other (i.e. entrée, snack, etc.) - 2
Food Centre – 3
Training Institute - 1
Provincial Food Processing Sector Council - 1
Food Processing Association – 1

Interview Statistics – Geographical Location

Ontario – 5
Quebec – 1
Alberta – 4
Saskatchewan - 1
British Columbia - 2
Atlantic Canada - 3
Appendix 12 – Discussion Document

Introduction

Mallot Creek is developing a diagnostic study of the food processing sector for the National Seafood Sector Council with a focus on addressing human resource development commonalities within the food industry. We would like to ask you a few questions regarding this area as it relates to your company goals.

Please note that all information is confidential and responses will be reported in aggregate. Your name and any information pertaining to your company specifically will not be included in any report.

Firstly, to gain an understanding of your company situation, I would like to ask a few broader questions and then focus down into labour and skills development issues:

1. Regarding the competitive nature of the industry, have you had to make changes to reduce costs and improve efficiencies?
   a. No, __________________
   b. Yes, what changes have you had to make? (i.e. increased skills training, purchase of technology, facility improvements)

2. Has consolidation of the retail and food service industry affected your business?
   a. No, why? ______________
   b. Yes, how? (i.e. do you find that there are fewer buyers domestically, larger markets/larger volumes, distribution, supply)

3. Has competition from global markets impacted you?
   a. Has the regulatory environment impacted the global market aspects of your business (e.g. HACCP)?
   b. If yes, how?

4. Is it your company’s mandate to develop new products?
   a. If yes, how is this done? (i.e. have you developed a team of people to work on new products, have you adopted better technology to allow for more innovation?)
   b. Are there specific skills that are difficult to source to be competitive in terms of new product development? Does this effort rely more on technology advancement rather than skills development, or is it a combination of both?

5. Are there specific product(s) and/or categories that you believe show particular potential for growth?
   i. What would your company require to compete in this area? (i.e. industry information, skills development for staff, more human resource, capital investment in technology, etc.)
Now, more specifically to labour and skills development:

6. Do you have challenges attracting and retaining (qualified) workers?
   a. No, why (i.e. have you set up a recruiting and training plan internally)? Can you describe your approach?

   b. Yes - are there certain jobs/occupations you find particularly difficult to fill?
      i. General labour – indicate skills/transferable skills
      ii. Skilled labour – indicate type of skill
      iii. Labour force issues – availability, reliability, cultural issues, language training, management, work place safety, absenteeism, etc.

7. What is your current training strategy? (i.e. send to workshops, in-house on the job training, employee to employee, on-line education, conferences, etc.)

8. Are their challenges to training your new and existing workforce?
   a. No – how have you addressed this?
   b. Yes, (i.e. time, resources, changing needs, etc.)

9. How do you motivate your employees to improve their skills?
   a. Do you have incentive programs or succession planning to promote current employees?

10. Is your skills development/training based on transferable skills or do you have highly specialized needs (i.e. meat cutter).

11. Food safety is a major concern for the food industry. Have you experienced any challenges regarding upgrading in this area? Have you experienced any other issues in this area that you have experienced?

12. Have you experienced any challenges regarding skills upgrading in this area? Have you experienced any other issues in this area that you have experienced?

13. Would you be interested in having the opportunity to communicate to similar and other food processing companies regarding industry related issues, market information and/or human resource solutions?
   a. Would you be willing to be contacted if an initiative like this moves forward?

Finally, would you like to add any other issues that you face regarding labour and skills development?

Thank you for your time.
Appendix 13 – An Overview of Food Processing Industry Occupations

Provided below is a listing of some of the more common food processing industry occupations:

Production Workers
Production workers in the food processing industry can account for up to fifty percent of the workforce. Production workers can be divided into two categories: 1) skilled and precision workers and 2) less-skilled machine operators and labourers. Less-skilled labourers generally start as helpers to experienced workers and learn skills on the job. Many less skilled jobs can be learned in a few days or a week. From our industry interviews, there is a scarce supply of skilled workers.

Sanitation Workers
Sanitation workers perform hygienic roles within processing plants to ensure cleanliness standards are in place and enforced. Although an important job, it requires less skilled labourers who are not very difficult to find.

Machinists and Maintenance Workers
As the presence of technology increases in the food manufacturing industry, more and more workers are operating machinery. In the future, the food processing industry will require additional workers to maintain this new equipment to ensure it is in good working order. Electricians are one component of this category which are the most in demand by industry.

Butchers
Butchers and meat cutters prepare standard cuts of meat and poultry for sale in retail or wholesale food establishments. They are employed in supermarkets, grocery stores, restaurants and butcher shops. There is currently a lack of qualified butchers in the food processing industry.

Bakers
Bakers mix and bake ingredients to produce end-user products according to recipes. In an effort to increase product shelf life, par and batch bakery has become increasingly popular. Par bakers increase the labour and technology necessary at the factory level, but reduce labour time at the food service, retail and consumer levels as all is needed is to place the par baked ingredients in the oven. Although baker positions are seen as less skilled, harsh working conditions (including extreme temperatures) make these positions difficult to source at times.

Shipper/Receivers
Perishable food may spoil if it is not properly packaged and delivered before shelf life expiry, so packaging and transportation employees play a vital role in the industry. The level of skill required to complete shipping and receiving duties makes the position available to a wide variety of skill levels and is thus not difficult to source.

Packaging Technicians
Similar to shippers and receivers, packaging employees play a vital role in the industry as food may spoil if it is not properly packaged. In addition, ensuring the proper labelling regulations have been followed is a critical role of any food manufacturer. This requires an additional level of skill and expertise and thus qualified packaging technicians are in somewhat of a shortage in the industry.
Sales and Marketing Representatives
Sales representatives are responsible for securing sales outlets for food processors and include product sales and technical sales. Product sales consist of selling the product produced by the processor, while technical sales are more industrial focused and consist of selling the process and product costing. Technical sales require very detailed product knowledge.

As sales opportunities become increasingly global, the sales force within the Canadian food processing industry will need to be more sophisticated and professional. Sales representatives who can speak more than one language will be an asset to manufacturers.

Administration Workers
The role of administration workers will become more important as food safety and traceability measures become imperative. Traceability programs deal with tracking and tracing, product recalls, crises management and identity preservation. Administrative workers will be responsible for tracking product through the supply chain and will thus require increasing levels of product knowledge.

Research & Product Development
Food scientists and technologists work in research laboratories or on production lines to develop new products, test current ones, and control food quality. Food scientists and researchers often need masters or doctoral degrees and are thus difficult to source.

The role of researchers and product developers is becoming pivotal as food processors receive pressure to launch new and innovative products that respond to global competition. Similarly, new processes that allow for cost reduction in existing products are the jobs of researchers and product developers.

Quality Assurance (QA)/Quality Insurance (QI)
Quality assurance staff is becoming increasingly important to meet the requirements of customers and government regulations.

Quality insurance staff inspects product quality and consistency, rather than food safety. The role of QI workers is to ensure the long term integrity of a company’s brand.

Engineering and Management
Many of the management and engineering positions in the food processing industry are filled at the undergraduate and graduate level and represent an important link in the transfer of new technology to industry. The University of Guelph has the only food science program in Ontario that is accredited by the Institute of Food Technologists. According to the Ministry of Agriculture, Food and Rural Affairs, the current enrolment in this program is insufficient to meet the needs of the Ontario food industry alone.106

## Appendix 14 – An Overview of Food Processing Industry Specific Human Resource Skill Development and Training Programs by Province

<table>
<thead>
<tr>
<th>Alberta</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Olds College</td>
<td>Offers a <strong>19-week certificate program in meat processing</strong>. The course is intended for butchers and meat cutters in small processing plants, workers in meat processing plants, and those employed in meat departments within retail outlets. The course focuses on training in health and safety, meat slaughter and cutting, and value-added processing.</td>
</tr>
<tr>
<td>Leduc Food Processing Development Centre</td>
<td>The Food Processing Development Centre in Leduc, is compromised of The Centre for Agri-Industrial Technology, The Food Science and Technology Centre and The Sensory Evaluation Centre. Assistance is available in areas such as product and process training and development.</td>
</tr>
</tbody>
</table>
### British Columbia

<table>
<thead>
<tr>
<th>Institution</th>
<th>Program/Training</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia Institute of Technology (BCIT)</td>
<td><strong>Fish Harvesting and Processing Technology</strong> Program, School of Health Sciences.</td>
<td>The course topics are steered by a committee of industry members to address specific training needs. The certificate involves taking short courses on topics such as harvesting, processing, manufacturing, importing and testing. The certificate for completion is issued by both the National Seafood Sector Council (NSSC) and BCIT.</td>
</tr>
<tr>
<td>Cariboo College, University College of the Cariboo (UCC)</td>
<td><strong>Retail Meat Processing and Manufacturing Certificate.</strong></td>
<td>The certificate meets the requirements of the B.C. Butcher Apprenticeship Program. The program consists of nine courses that train candidates to meet the evolving needs of retail butchers.</td>
</tr>
</tbody>
</table>

### New Brunswick

<table>
<thead>
<tr>
<th>Institution</th>
<th>Courses/Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collège communautaire du Nouveau-Brunswick</td>
<td>Short term processing related courses</td>
</tr>
</tbody>
</table>

### Newfoundland

<table>
<thead>
<tr>
<th>Institution</th>
<th>Courses/Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of North Atlantic</td>
<td>Courses offered for training individuals within the fish and seafood processing sector.</td>
</tr>
<tr>
<td>Marine Institute</td>
<td>In-plant training as well as full programs for food and seafood processing programs.</td>
</tr>
</tbody>
</table>

### Nova Scotia

<table>
<thead>
<tr>
<th>Institution</th>
<th>Courses/Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dalhousie University</td>
<td>Offers a short course in Seafood Technology through its Canadian Institute of Fisheries Technology. It covers fish and shellfish handling and processing, quality control, and sanitation. Some specific topics that will be covered include sensory evaluation, packaging, waste reduction, marketing, and HACCP (QMP-R). The program gives the student an overview of the seafood processing industry and is intended for managers, supervisors and trainees in various areas of the industry.</td>
</tr>
</tbody>
</table>
Ontario

<table>
<thead>
<tr>
<th>Guelph Food Technology Centre (GFTC)</th>
<th>Offers a <strong>three-day certificate course in Meat Processing</strong>. The course is more scientifically-based than other courses. Topics include troubleshooting in processed meat production, processing technologies, and new research developments. The course is intended for research, quality, production, and process personnel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guelph Food Technology Centre</td>
<td>Offers a <strong>number of courses in food safety</strong> and HACCP, including Planning, Documentation, Management, Certification, Validation, and Verification. The Centre also offers a number of other courses in food safety including a diploma in Sanitation and Hygiene.</td>
</tr>
<tr>
<td>Guelph Food Technology Centre</td>
<td>GFTC also offers a number of <strong>“Train the Trainer”</strong> courses intended for supervisors and managers. Courses intended for supervisors and managers include “<strong>Effective Training for the Plant Floor</strong>” and “<strong>Supervision Skills for the Food Industry</strong>”.</td>
</tr>
</tbody>
</table>

Quebec

<table>
<thead>
<tr>
<th>Commission scolaires de :</th>
</tr>
</thead>
<tbody>
<tr>
<td>- La Capitale</td>
</tr>
<tr>
<td>- La Pointe-de-l’Île</td>
</tr>
<tr>
<td>- Marie Victorin</td>
</tr>
<tr>
<td>- Chemin-du-Roy</td>
</tr>
<tr>
<td>- Laurentides</td>
</tr>
<tr>
<td>All of these institutions offer <strong>training courses relevant to the bakery sector</strong>.</td>
</tr>
<tr>
<td>Lester-B.-Pearson SB Centre de formation FG/FP Pearson</td>
</tr>
<tr>
<td>Institut de technologie agroalimentaire (ITA)</td>
</tr>
<tr>
<td>Centre spécialisé des pêches de Grande rivière</td>
</tr>
<tr>
<td>Continuing Education – University Laval</td>
</tr>
<tr>
<td>Saskatchewan</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The Saskatchewan Institute of Applied Science and Technology</td>
</tr>
<tr>
<td>The Saskatchewan Institute of Applied Science and Technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Training Programs – Canada</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hermann Laue Spice Company Inc.</td>
<td>Offers training courses in meat technology, food ingredients, food chemistry and microbiology of spices. Technical assistance is also offered on a company-specific basis.</td>
</tr>
<tr>
<td>Rector Foods Ltd.</td>
<td>Rector Foods is a leader in spice formulation and offers educational and training seminars to food processing stakeholders. Topics covered include food safety, HACCP, ISO and other standards, market trends and ingredient usage. There are also sales management courses. Seminars can be done at Rector Foods headquarters in Brampton Ontario or on-site at the client’s plant.</td>
</tr>
<tr>
<td>The Baking Association of Canada</td>
<td>Offers a correspondence course for students to gain a certificate as a Certified Bakery Specialist (CBS). Courses include a diverse range of training areas including bakery technology, process and production techniques, health and safety, sanitation, HACCP, and packaging.</td>
</tr>
<tr>
<td>Packaging Association of Canada</td>
<td>Offers a 14-day certificate course for packaging professionals. The course covers all facets of packaging including regulations and legislation, best environmental practices, and graphic design.</td>
</tr>
<tr>
<td>National Seafood Sector Council</td>
<td>The NSSC’s training programs are developed in conjunction with industry and are designed to respond to the industry on a variety of topics such as: HACCP, Quality Management Program (QMP), Ergonomics and Pest Control.</td>
</tr>
<tr>
<td>Interprovincial Standards (Red Seal) Program</td>
<td>Established to provide greater mobility for skilled workers across Canada by recognizing a basic set of skills achieved in a chosen profession.</td>
</tr>
</tbody>
</table>
The following table represents a sample of industry specific provincial skill and training development programs. Degrees and diplomas from post secondary institutions are highlighted in generalities below:

**Figure 1.2 – Educational Programs and Diplomas by Province**

<table>
<thead>
<tr>
<th>University/College</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Alberta</td>
<td>BSc in Nutrition and Food Sciences</td>
</tr>
<tr>
<td></td>
<td>MSc and PhD in Agricultural, Food and Nutritional Science</td>
</tr>
<tr>
<td></td>
<td>MEng in Agricultural, Food and Nutritional Science</td>
</tr>
<tr>
<td>Lethbridge College Alberta</td>
<td>One year certificate programs and two year diploma programs are offered in Manufacturing Process Technology. Topics covered include lean manufacturing, food processing and manufacturing process, and maintenance, quality and team development. The course is currently being restructured for learning in the workplace.</td>
</tr>
<tr>
<td>University of British Columbia</td>
<td>BSc, MSc and PhD in Food Science</td>
</tr>
<tr>
<td></td>
<td>BSc in Food Market Analysis</td>
</tr>
<tr>
<td>University of Manitoba</td>
<td>BSc and MSc in Food Science</td>
</tr>
<tr>
<td>Université de Moncton</td>
<td>BSc en sciences et technologie des aliments - biotechnologie</td>
</tr>
<tr>
<td>Memorial University of Newfoundland</td>
<td>MSc in Food Science</td>
</tr>
<tr>
<td>Dalhousie University</td>
<td>Bachelor of applied science in Food Science</td>
</tr>
<tr>
<td></td>
<td>MSc and PhD in Food Science</td>
</tr>
<tr>
<td></td>
<td>MSc in Fisheries Engineering</td>
</tr>
<tr>
<td>University of Guelph</td>
<td>Certificate in Food Science</td>
</tr>
<tr>
<td></td>
<td>BSc Honours Food Science</td>
</tr>
<tr>
<td></td>
<td>MSc and PhD in Food Science</td>
</tr>
<tr>
<td></td>
<td>MSc in Food Safety and Quality Assurance</td>
</tr>
<tr>
<td>Ryerson University</td>
<td>Certificate in Food Security</td>
</tr>
<tr>
<td>Université Laval</td>
<td>Certificat en sciences et qualité des aliments</td>
</tr>
<tr>
<td></td>
<td>Certificat en technologie alimentaire et nouveaux aliments</td>
</tr>
<tr>
<td></td>
<td>Baccalauréat en sciences et technologie des aliments</td>
</tr>
<tr>
<td></td>
<td>Doctorat en sciences et technologie des aliments</td>
</tr>
<tr>
<td></td>
<td>Maîtrise en sciences et technologie des aliments</td>
</tr>
<tr>
<td>McGill University</td>
<td>Bachelor of science in food science and agricultural technology</td>
</tr>
<tr>
<td></td>
<td>MSc and PhD in food science and agricultural chemistry</td>
</tr>
<tr>
<td>Université de Montreal</td>
<td>DESS certificat en technologie et salubrite des viandes ou salubrite des viandes</td>
</tr>
<tr>
<td>University of Saskatchewan</td>
<td>BSc, BSA and PhD in Food Science</td>
</tr>
<tr>
<td></td>
<td>PhD in Nutrition</td>
</tr>
<tr>
<td></td>
<td>Master of Agriculture</td>
</tr>
<tr>
<td></td>
<td>MAgr in food science</td>
</tr>
<tr>
<td></td>
<td>MSc in nutrition</td>
</tr>
<tr>
<td></td>
<td>MSc in food science</td>
</tr>
</tbody>
</table>
Appendix 15 – An Overview of Available Funding: Human Resource Skill Development and Training Funds by Province

There are a variety of funds available to promote skills learning and training in the food processing industry. Some funds require that processors “match” contributions, while others are completely compensated for.

Interviewed stakeholders cited that they are generally unaware of available funding and how, or if, they qualify. In addition, the application process was defined as being complicated and intimidating.

<table>
<thead>
<tr>
<th>Province</th>
<th>Description</th>
</tr>
</thead>
</table>
| Alberta       | Alberta's Food Processing Association (AFPA) – Skills Development Initiative

The initiative is a fund mandated to develop human resources in the food processing industry in Alberta. Total available funding of $3 million comes from the Alberta Agriculture Food and Rural Development and is administered by the Alberta Food Processors Association. This initiative provides funding for a wide range of skills development projects, programs and services that enhance the skills of food processing workers. All project funding must be matched 50/50 by the awarded organization.

| British Columbia | Investment Agriculture Foundation of British Columbia

The Investment Agriculture Foundation of British Columbia is a non-profit organization that invests federal and provincial funds to help the agri-food industry adapt to change. The Foundation is industry-led and is comprised of member organizations from across the industry. Food and beverage processing initiatives must produce benefits that can be shared by the entire British Columbia agriculture industry. Approximately $1.5 million is specifically allocated for food and beverage processing projects.

| Manitoba       | Training Sponsorship Fund – Manitoba Food Processors Association (MFPA)

The MFPA administers the fund for the food processing industry, which can be used to support any training in the industry, including in-house orientation and training. The fund offers 50% compensation for training related to the food industry, or approximately 25% for more generic skills training such as customer service.
<table>
<thead>
<tr>
<th>Province</th>
<th>Organization</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ontario</strong></td>
<td><strong>Ontario Ministry of Agriculture and Food</strong></td>
<td>Ontario food processing companies are eligible to receive assistance from OMAF to take a Food Handler Training Course at the Guelph Food Technology Centre. The course normally costs $300.00, however OMAF will contribute $200.00.</td>
</tr>
<tr>
<td></td>
<td><strong>Materials and Manufacturing Ontario (MMO) - funded by the Ontario Centre of Excellence</strong></td>
<td>MMO supports over 100 research projects at 12 universities, in a wide variety of areas including chemical processing, management systems, and polymers and plastics. As well, MMO supports a wide variety of educational and training programs to help people develop the skills they need to respond to technological changes in the workplace. Programs usually involve a combination of industry, MMO, and a University. The industry and MMO normally each contribute 50% of project costs. Education and training programs include an Industrial Practice Master Scholarship, a Graduate Student Scholarship, and the Connections program. Funding from MMO ranges depending on the nature of the program, typical programs may receive $10,000 to $25,000.</td>
</tr>
<tr>
<td><strong>Prince Edward Island</strong></td>
<td><strong>P.E.I. Food Products Development Fund</strong></td>
<td>Helps island businesses access the services offered at the P.E.I. Food Development Centre by matching 50% of the total service cost up to $10,000. The fund is designed to help businesses design, improve, and market food products. Examples of projects include HACCP training and productivity improvements.</td>
</tr>
<tr>
<td><strong>Saskatchewan</strong></td>
<td><strong>Saskatchewan Government</strong></td>
<td>The Human Resource Development Fund for Agri-Business is offered by the Saskatchewan Government. The program’s goal is to improve management skills and human resource development in small to medium sized food processing companies. There is approximately $2.7 million available for qualified applicants.</td>
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<td><strong>Saskatchewan Food Development Centre</strong></td>
<td>The Processing Food Safety course is part of the FoodSTEPS program available at the Saskatchewan Food Development Centre. It is aimed at helping small and medium sized food processors to meet food safety and quality standards. Total funding available under the Saskatchewan Food Development Centre is approximately $10.7 million.</td>
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<tr>
<td>Program</td>
<td>Description</td>
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<td>CanAdapt Small Projects Initiative (SPI)</td>
<td>Funded through Agriculture and Agri-Food Canada’s CARD fund, this program is specifically targeted to small and medium sized firms. The goal of the fund is to assist applicants with limited resources in marketing and human resource development projects. The fund totals $6.71 million in budgeted project costs; to date approximately $4.51 million has been committed.</td>
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<td>Human Resources and Skills Development Canada (HRSDC)</td>
<td>Training Centre Infrastructure Funding Program – Pilot Program sponsored by the HRSDC that offers trust funds to support training centres. The fund aims to improve workplace skilled trades training and productivity by enabling workers to train on equipment they will likely use on the job. The fund is intended for union-employer training centres, it will cover up to 50% of costs to a maximum of $500,000.</td>
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<td>HRSDC</td>
<td>Human Resources and Skills Development Canada offers two grants that assist organizations in writing health and safety standards and promoting them in the workplace. The HRSDC offers corporations, organizations, groups, and individuals $12,000 grants to assist in the writing of occupational health and safety programs and $15,000 grants to support health and safety in the workplace.</td>
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<td>The Canadian Food Inspection Agency</td>
<td>The Canadian Food Inspection Agency encourages the implementation of HACCP programs and provides area and regional Food Safety Enhancement Teams. A full set of materials on HACCP may also be purchased from the CFIA for approximately $100.00.</td>
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<td>CanAdvance Program (former C.A.R.D.S) funded by Agriculture and Agri-Food Canada’s Advancing Canadian Agriculture and Agri-Food (ACAAF) program</td>
<td>The Federal CanAdvance Program targets agriculturally-based projects that will help a sector respond to the needs of a changing marketplace. The program operates under three pillars, including industry -led solutions to current and emerging issues; capturing market opportunities by advancing research results; or sharing information to advance the sector. Skill and training development initiatives may be incorporated into the mandates of any of the three pillars.</td>
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<td>The Innovation Support Fund and the Direct Access Fund</td>
<td>The Innovation Support Fund and the Direct Access Fund were both launched by the Canadian Dairy Commission. The direct access fund is paid for by the Commission and provides a food scientist free of charge to eligible companies. Total funding per company may total up to $3,000 in services. The Innovation support fund is designed to help companies further develop their processed dairy products, in the interest of expanding the milk market.</td>
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