MARKET ANALYSIS REPORT

“Identifying Opportunities for British Columbia’s Highbush Blueberry Industry”

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>3</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>5</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>5</td>
</tr>
<tr>
<td><strong>DOMESTIC MARKET ANALYSIS</strong></td>
<td>6</td>
</tr>
<tr>
<td><em>Overview of B.C.’s Blueberry Industry</em></td>
<td>6</td>
</tr>
<tr>
<td>Blueberry Production and Exports</td>
<td>6</td>
</tr>
<tr>
<td>Key Export Markets and Competitors</td>
<td>7</td>
</tr>
<tr>
<td>Key Issues, Strengths and Weaknesses</td>
<td>7</td>
</tr>
<tr>
<td><em>External Threats Facing B.C.’s Blueberry Industry</em></td>
<td>8</td>
</tr>
<tr>
<td>Blueberry Production Increases</td>
<td>8</td>
</tr>
<tr>
<td>Effects of the Recession</td>
<td>8</td>
</tr>
<tr>
<td>Major Trends that Could Negatively Affect Future Demand for Blueberries</td>
<td>9</td>
</tr>
<tr>
<td><em>External Opportunities Facing B.C.’s Blueberry Industry</em></td>
<td>10</td>
</tr>
<tr>
<td>Overview of Blueberry-Related Products</td>
<td>10</td>
</tr>
<tr>
<td>Opportunities to Utilize Blueberries as Substitute for Existing Products</td>
<td>13</td>
</tr>
<tr>
<td>Major Trends that Could Positively Affect Future Demand for Blueberries</td>
<td>14</td>
</tr>
<tr>
<td><strong>FOREIGN MARKET ANALYSIS</strong></td>
<td>16</td>
</tr>
<tr>
<td><em>Regaining Market Share in Japan</em></td>
<td>16</td>
</tr>
<tr>
<td>Market Overview</td>
<td>16</td>
</tr>
<tr>
<td>Consumer Profile</td>
<td>17</td>
</tr>
<tr>
<td>Major Trends within the Market</td>
<td>19</td>
</tr>
<tr>
<td>Food Industry Overview</td>
<td>20</td>
</tr>
<tr>
<td><em>Developing a Market in China</em></td>
<td>23</td>
</tr>
<tr>
<td>Market Overview</td>
<td>23</td>
</tr>
<tr>
<td>Consumer Profile</td>
<td>23</td>
</tr>
<tr>
<td>Major Trends within the Market</td>
<td>25</td>
</tr>
<tr>
<td>Food Industry Overview</td>
<td>26</td>
</tr>
<tr>
<td><em>Taking Advantage of Emerging Opportunities in India</em></td>
<td>31</td>
</tr>
<tr>
<td>Market Overview</td>
<td>31</td>
</tr>
<tr>
<td>Consumer Profile</td>
<td>32</td>
</tr>
<tr>
<td>Major Trends within the Market</td>
<td>34</td>
</tr>
<tr>
<td>Food Industry Overview</td>
<td>35</td>
</tr>
<tr>
<td><strong>CONCLUSION</strong></td>
<td>39</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The blueberry industry in British Columbia (B.C.) is facing intense competition from growers around the world who have shifted over to blueberry production in hopes of capitalizing on increased demand for this popular superfruit. With supply growing faster than demand and North American production levels reaching record levels, it is expected that the worldwide supply of blueberries could exceed 1.5 billion pounds by 2015. Despite being the largest producer of highbush blueberries in Canada and the second largest producing region in the world, B.C. is facing challenges selling blueberries in a saturated market. The purpose of this study is to provide the B.C. blueberry industry with market information that will enable them to identify emerging global opportunities and formulate effective marketing strategies for the markets of China, India and Japan.

In an attempt to create new opportunities for blueberries, manufacturers have integrated blueberries into many non-traditional products, such as: cat food, gum, ice wine, liqueurs, kebabs, chicken liver pate, peanut butter, snack bars, tea and tortilla chips. Looking forward, opportunities are emerging for blueberry colour pigments to be used as substitutes for artificial colours or, in the distant future, as a substitute for silicon in solar energy panels. There are also promising opportunities for blueberry extract to be used as a substitute for artificial flavourings or as a functional additive to enhance the health properties of other food products. One recent study even showed promise for the use of biotransformed blueberry juice as a substitute for existing anti-obesity and anti-diabetic medications or products. As a result of the desire to move away from artificial colours, and the growing market for superfruits, functional ingredients and naturally healthy products that help with eyesight and brain function, the demand for blueberries is set to increase.

B.C.’s key competitors in the global market include the U.S., Chile, Argentina, Poland, Spain and China. Although B.C. faces higher costs of production than most of its competitors, the province benefits from ideal growing conditions for highbush blueberries, efficient air transportation within close proximity to packers and Canada’s strong reputation for quality-assurance and food-safety programs. Within the markets of China and India, B.C. blueberry exporters will need to leverage this reputation to build demand in these markets while they are still in their infancy. In Japan, where Canada’s quality and food-safety reputation is no longer a competitive advantage, opportunities may exist for B.C. exporters to increase supply of blueberries to manufacturers of Japanese-branded biscuits, snack bars, spreads and yoghurt. By encouraging manufacturers to use B.C. blueberries as a functional ingredient in Japanese-branded products, this will ensure that these products are not limited to the premium imported section of speciality shops and high-end supermarkets, and will increase demand for B.C. blueberries within this market.

B.C.’s market share in Japan has declined significantly since 2004, when the province exported a total of 305 metric tonnes of fresh highbush blueberries and 3,978 metric tonnes of frozen highbush blueberries to the country. In 2009, B.C. exported 71 metric tonnes of fresh highbush blueberries and 1,283 metric tonnes of frozen highbush blueberries to Japan. The United States and Chile are the main providers in terms of quantity to the Japanese market, but Australia is benefiting from its close proximity to the market and strong reputation for ‘clean’ product. One importer reports that they prefer not to import from Chile until fresh blueberries from Australia are no longer available, as they indicate that customers prefer the sweet quality of Australian blueberries. The importer notes that the problem with Chilean fruit is that the greater variation in temperature during transportation leads to lower quality blueberries with a shorter shelf life. It is estimated that about 40% of imported blueberries are sold to cake decorators and jam manufacturers in Japan, with the other 60% going to large supermarkets. Cake manufacturers are willing to pay premium prices for smaller blueberries of higher
quality. Spreads, such as blueberry jam, are expected to show very strong growth moving forward as a result of increased demand from Japan’s rapidly ageing population.

Blueberry production acreage in China climbed 410% between 2005 and 2007. In 2009, B.C. exported 24 metric tonnes of frozen highbush blueberries to the Chinese market. Currently, B.C. faces foreign competition in this market from the U.S., Sweden, Poland and the Ukraine; however, it is expected that other countries are poised to enter the market as a result of the rapidly growing demand for blueberries in the country. The CEO of China Organic Agriculture believes that opportunities in the blueberry industry are enormous, as there is a growing interest in healthy food alternatives and families are looking for products that can both facilitate cognitive function and disease prevention in seniors while providing the nutrition necessary for proper development in children. Within the jams and preserves subsector blueberry was ranked as the fourth most popular flavour in 2009, up from sixth place in 2007 and 2008. As well, blueberry was ranked as the third most popular flavour in both fruited yoghurt and flavoured yoghurt in 2009, up from fifth place in 2006. The market for fresh fruit within the country still lacks a solid framework and is dominated by small-scale markets and food vendors. However, rising consumer incomes – particularly in the larger cities of Beijing and Shanghai – are opening the door for premium-quality imported fruits. An increasing number of Chinese consumers are switching over to imported fruits because they prefer the better taste, nutrition and appearance.

Very little information exists for the blueberry market in India, as the fruit is still quite unknown within the country. The U.S. Highbush Blueberry Council held week-long promotions in Mumbai and Delhi in October 2008 – shortly after the government legalized the importation of fresh blueberries – and found that 85% of consumers surveyed loved the taste of this new fruit. With close to five million local grocers in India providing informal credit, home delivery and sales in small quantities, organized retail is only just beginning to make its mark in the country. The greatest opportunities for B.C. blueberries exist in the most affluent cities of India – New Delhi, Bengaluru, Greater Mumbai, Chennai, Hyderabad and Kolkata – where middle- and high-income consumers are increasingly shopping at supermarket chains. These wealthier consumers prefer to purchase vegetables and fruits from supermarkets because they see these products as being cleaner and fresher than those found in local shops. Due to the lack of knowledge of blueberries in the market, initial focus in India will need to be on educating these wealthier consumers about the health benefits associated with this unknown superfruit.
PURPOSE

Building upon the market-information needs identified by the B.C. Blueberry Council, the B.C. Ministry of Agriculture and Lands, with support from Agriculture and Agri-food Canada, conducted this study to help B.C.’s blueberry growers remain competitive in a rapidly expanding industry.

The purpose of this study is to:

- Identify global trends that may affect demand for blueberries or influence future marketing strategies
- Identify products on the market that utilize blueberries in non-traditional formats or that may lend themselves to product development/formulation that looks at incorporating blueberries into non-traditional uses
- Provide market insight into the strong growth markets identified in An Export Marketing Strategy for the British Columbia Highbush Blueberry Industry — Japan, China and India — to facilitate future product development and support the formulation of successful marketing strategies for these markets

INTRODUCTION

Over the past five years global blueberry production acreage has increased dramatically. This has resulted in a large surplus of blueberries on the market that is driving prices down and making it difficult for B.C.’s blueberry growers to remain competitive in their current markets.

This report builds upon recommendations made in An Export Marketing Strategy for the British Columbia Highbush Blueberry Industry by providing market information to assist the B.C. Blueberry Council in identifying new opportunities in the global market and developing appropriate marketing strategies to capitalize on these opportunities. The report begins by providing an overview of B.C.’s blueberry exports, key competitors and key markets, and a summary of the strengths and weaknesses specific to B.C.’s blueberry industry. The report then highlights the threats facing B.C.’s blueberry industry, the global trends that may influence future demand for blueberries and the emerging opportunities to utilize blueberries in non-traditional product formats. The report concludes with a broad-level overview of Japan, China and India to provide B.C.’s blueberry growers with a basic understanding of the trends, consumer preferences and emerging opportunities within each of these markets.

This study was funded through the Growing Forward Trade and Market Development for the Canadian Agri-food and Agri-based Products Sector Program. This program aims at facilitating industry success in global and domestic markets. Through industry-led marketing strategies, a Canada branding strategy, market intelligence and services for exporters, and actions to maintain and improve market access, the program helps equip the sector to seize market opportunities and address emerging challenges.

The primary sources of market information utilized in this study are:

Euromonitor International’s Global Market Information Database: www.euromonitor.com
Global Trade Information Services, Inc.’s Global Trade Atlas: www.gtis.com
DOMESTIC MARKET ANALYSIS

OVERVIEW OF B.C.’S BLUEBERRY INDUSTRY

Blueberry Production and Exports

B.C. is the largest producer of highbush blueberries in Canada and the second largest producing region in the world. In 2008, B.C. had 18,000 planted acres of blueberries of which roughly 14,000 acres were already producing and another 4,000 were not yet in production. B.C.’s blueberry growers produced 40,075 metric tonnes of blueberries in 2009 at a farm-gate value exceeding $52.5 million.

Of the 34,842 metric tonnes of highbush blueberries exported out of Canada in 2009, B.C. accounted for 98.6% of the fresh highbush blueberry exports, 78.9% of the frozen highbush blueberry exports and 87.0% of the overall highbush blueberry exports.

| TABLE 1 – EXPORTS OF FRESH HIGHBUSH BLUEBERRIES FROM BRITISH COLUMBIA |
|--------------------------|----------|--------|--------|--------|--------|--------|--------|--------|
| Export Destination       | Unit     | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   |
| World                    | tonnes   | 10,472 | 12,311 | 10,936 | 10,593 | 8,175  | 9,595  | 14,103 |
| United States            | tonnes   | 10,272 | 11,928 | 10,650 | 10,450 | 7,958  | 9,416  | 13,993 |
| Japan                    | tonnes   | 180    | 305    | 271    | 92     | 83     | 59     | 71     |
| Hong Kong                | tonnes   | 3      | 39     | 11     | 5      | 7      | 6      | 17     |
| United Kingdom           | tonnes   | 0      | 29     | 0      | 44     | 100    | 80     | 13     |
| Taiwan                   | tonnes   | 3      | 1      | 4      | 2      | 4      | 2      | 7      |
| Singapore                | tonnes   | 0      | 1      | 1      | 0      | 0      | 0      | 3      |
| Netherlands              | tonnes   | 0      | 0      | 0      | 0      | 0      | 18     | 0      |
| Germany                  | tonnes   | 0      | 0      | 0      | 0      | 1      | 9      | 0      |
| Belgium                  | tonnes   | 0      | 0      | 0      | 0      | 22     | 4      | 0      |
| Switzerland              | tonnes   | 14     | 0      | 0      | 0      | 1      | 0      | 0      |
| China                    | tonnes   | 0      | 5      | 0      | 0      | 0      | 0      | 0      |
| Ireland                  | tonnes   | 0      | 3      | 0      | 0      | 0      | 0      |

Source: Global Trade Atlas, Commodity 08104012

| TABLE 2 – EXPORTS OF FROZEN HIGHBUSH BLUEBERRIES FROM BRITISH COLUMBIA |
|--------------------------|----------|--------|--------|--------|--------|--------|--------|--------|
| Export Destination       | Unit     | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   |
| World                    | tonnes   | 7,995  | 11,946 | 13,889 | 13,714 | 15,087 | 17,549 | 16,202 |
| United States            | tonnes   | 5,466  | 7,594  | 9,930  | 9,787  | 11,682 | 14,843 | 14,358 |
| Japan                    | tonnes   | 2,516  | 3,978  | 3,353  | 3,269  | 1,824  | 1,738  | 1,283  |
| Australia                | tonnes   | 3      | 156    | 332    | 455    | 969    | 739    | 390    |
| New Zealand              | tonnes   | 4      | 131    | 250    | 75     | 289    | 159    | 131    |
| China                    | tonnes   | 0      | 0      | 0      | 0      | 0      | 24     | 24     |
| United Kingdom           | tonnes   | 0      | 0      | 0      | 0      | 73     | 269    | 0      |
| South Korea              | tonnes   | 0      | 0      | 0      | 0      | 0      | 22     | 7      |
| Colombia                 | tonnes   | 0      | 0      | 0      | 0      | 0      | 24     |
| Belgium                  | tonnes   | 0      | 44     | 24     | 24     | 47     | 0      |
| Hong Kong                | tonnes   | 0      | 0      | 0      | 0      | 5      | 0      |
| Netherlands              | tonnes   | 0      | 44     | 0      | 22     | 0      |
| Germany                  | tonnes   | 0      | 0      | 0      | 8      | 0      | 0      |

Source: Global Trade Atlas, Commodity 08119012
KEY EXPORT MARKETS AND COMPETITORS

Key export markets identified in An Export Strategy for the British Columbia Highbush Blueberry Industry⁷ include Japan, China and India. These markets were classified as strong-growth markets based on the likelihood of sustained economic growth, the markets acceptance of western products, the lack of trade barriers and the ability of Canada to deal with the competition. Markets identified as having a modest growth potential include South Korea, Russia, Taiwan, Australia, United Arab Emirates, Germany, Mexico and the Philippines.

B.C.’s global competitors include Chile, Argentina, Poland, Spain, China and the U.S.⁸ The U.S. is currently B.C.’s strongest global competitor in the frozen/processed blueberry market, but as world production increases it can be expected that B.C.’s other competitors will continue to seek a greater share of this market. Chile’s lower costs of production and world-class reputation for fruit and wine exports have positioned the country to be a major competitor moving forward. B.C.’s other global competitors also experience lower costs of production, but have relatively weak quality-assurance and food-safety programs that are currently hindering their ability to compete successfully.

Chile and Argentina are not direct competitors in the fresh blueberry market during Canadian summers – as fresh blueberries are harvested from October until March in South America⁹ and from the start of July until September in British Columbia¹⁰ – but when only frozen B.C. blueberries are available in the winter, consumers can choose fresh produce from South America. During the summer, B.C. growers face strong competition for fresh blueberries in North America from the major producing states of Michigan, New Jersey and Oregon.¹¹

KEY ISSUES, STRENGTHS AND WEAKNESSES

Increased interest in blueberries among both consumers and growers in North America has led to increased acreage, up more than 33% since 2005. It is expected that the worldwide supply of blueberries could exceed 1.5 billion pounds by 2015.¹² As a result of the worldwide surplus of blueberries, the current price that B.C. growers can sell their produce for does not provide them with an acceptable return to cover increasing costs.

It’s important to note that the blueberry market cycle is like all others – a surge in demand leads to higher prices; new players rush in; and, inevitably, more product becomes available and producers get squeezed as prices drop.¹³ The current surplus of blueberries on the market has put downward pricing pressure on producers and is now limiting their ability to cover costs while still properly marketing their products. Unless new markets are developed, demand increases and/or producers rationalize marginal acreage, the prices for blueberries will likely remain low. With little control over the worldwide supply of blueberries, B.C. growers will need to focus on expanding demand for their blueberries in new markets.

In addition to the challenge of selling product in a saturated market, B.C. blueberry growers also face some of their own weaknesses. With farms located in the most densely populated region of B.C., growers must contend with extremely high land costs and face ongoing rural/urban conflicts from the use of bird scaring devices, frost protection and pesticide application. These growers also face large recruitment costs due to the high cost of labour in Canada and the need to recruit seasonal workers. In addition to the challenges resulting from higher costs of production, some studies claim that highbush blueberries (such as those produced in B.C.) contain less antioxidants than lowbush blueberries (such as those grown in eastern Canada and the U.S.). Although these studies may eventually be proven inaccurate, claims such as these are currently being used by the lowbush-blueberry industry to position their wild blueberry products as healthier alternatives to the highbush blueberry products from B.C.
B.C. blueberry growers will need to leverage their strengths to overcome these weaknesses and ensure that they remain competitive. With ideal growing conditions for highbush blueberries and efficient ground and air transportation within close proximity to packers, B.C.’s blueberry growers are positioned in an excellent location to take advantage of emerging global opportunities. Growers can leverage Canada’s strong reputation for top-notch quality-assurance and food-safety programs to ensure premium positioning within foreign markets. As well, B.C.’s Asia-Pacific Initiative is investing heavily in positioning B.C. as a location of choice for importers looking to source products from North America to Asia and, with the large population of Chinese, Indian and Japanese immigrants living in Metro Vancouver, B.C. blueberry processors have an ideal testing ground for new products before exporting them overseas.

**EXTERNAL THREATS FACING B.C.’S BLUEBERRY INDUSTRY**

**Blueberry Production Increases**

As a result of increased consumer interest in blueberries over the past decade, many farmers worldwide switched over to blueberry production in hopes of capitalizing on emerging opportunities. According to the World Production and Acreage Report published by the U.S. Highbush Blueberry Council, between 2005 and 2007 China’s acreage increased by 410%, Spain’s increased by 278%, and Chile’s increased by 102%. As consumer interest continues to spread into new markets, and domestic demand increases within countries like China, it is likely that B.C.’s competitors will continue to increase their blueberry production capacity. With the surplus of blueberries expected to continue, B.C. growers will face increasing pressure to differentiate their products and find new markets.

**Effects of the Recession**

As a result of the economic downturn consumers have been trading in premium products for the basics and eating more meals at home. As blueberries are not a basic component of the average consumer’s diet, it is likely that they will continue to be substituted for cheaper fruits until consumers recover from the effects of the recession. According to a report by the Produce for Better Health Foundation, fruit consumption in the U.S. dropped 12% last year and out-of-season produce appeared to be the worst affected.

Analysts at Euromonitor – an independent provider of market intelligence – believe that the bottom of the economic downturn has already been reached and we should see a U-shaped recovery in developed markets and V-shaped recovery in emerging markets. Their latest 2009 projections indicate a continued reduction in consumer spending on packaged food and beverages, but the expected reduction speaks more about where consumers are shopping as opposed to what they are actually buying. Euromonitor expects that “hypermarkets and discounters will continue to see the largest retail value gains between 2009 and 2013 as consumers worldwide seek out economic options and value for money.”
MAJOR TRENDS THAT COULD NEGATIVELY AFFECT FUTURE DEMAND

The Canadian Food Inspection Agency does not currently allow numerical Oxygen Radical Absorbance Capacity (ORAC) statements or claims on any food product sold in Canada. These antioxidant statements fall under the definition of a drug and are not yet permitted on food products.\(^\text{18}\) However, with growing consumer demand for food products that are high in antioxidants, it is likely that this trend will put increasing pressure on the regulatory bodies to develop a standardized ORAC labelling system for any product making claims of beneficial antioxidant properties.

The move towards ORAC labelling would enable blueberries to be positioned as a premium product relative to some other fruits and vegetables because of their higher antioxidant levels. While this is great for the blueberry industry as a whole, it may also influence which types of blueberry products are chosen by consumers.

The current scientific evidence regarding the antioxidant properties in blueberries is still up for debate, and many studies may be shown to lack credibility in the future. With that in mind, the following areas of antioxidant research will be important to follow as the results of these types of studies may be influential in determining which blueberry products will benefit from ORAC labelling more than others. The move towards ORAC labelling could negatively affect demand for:

- blueberry products that have to be heated during production (i.e. any canned berry product) as some studies claim that heat is a destroyer of antioxidant potential\(^\text{19}\)
- B.C.’s highbush blueberries vs. wild blueberries as some studies claim that wild blueberries have greater anti-oxidant potential than cultivated blueberries\(^\text{20}\)
- non-organic blueberries and increase demand for organic blueberries as some recent studies claim that organic blueberries have more phytonutrients and antioxidant activity\(^\text{21}\)
- products promoting blueberries to be consumed with milk (i.e. cereals with blueberries) as a recent study claims that blueberries lose most of their antioxidant power when eaten with milk\(^\text{22}\)

A trend that is already affecting demand for blueberries is the discovery of new, exotic superfruits that have greater antioxidant potential. As consumers look for more exotic flavours and new ways to consume functional ingredients in non-traditional forms, this may lead them to choose other lesser known superfruits because of their novelty value. To capitalize on this, competitors are becoming very aggressive at positioning exotic fruits as healthier alternatives to blueberries by investing heavily in promoting their products as the newest superfruits. While this trend may slow over time, current demand for blueberries is likely to be affected until consumers learn more about antioxidants and the actual benefits of each fruit.

Common superfruits already on the market include acai, cranberry, goji, grape, guarana, mango, mangosteen, noni, pomegranate and sea-buckthorn. The global consumer and market research firm Mintel has predicted that cupuacu will emerge as the next big superfruit flavour in 2010.\(^\text{23}\) Some other emerging superfruit candidates include African baobab, lingonberry, red bayberry, bilberry, black raspberry, black chokeberry, blackcurrant, sour cherry, elderberry, Saskatoon berry and Indian gooseberry.
EXTERNAL OPPORTUNITIES FACING B.C.’S BLUEBERRY INDUSTRY

OVERVIEW OF BLUEBERRY-RELATED PRODUCTS

The following table outlines some of the newer blueberry-related products found on the market that showcase areas where blueberries can be integrated into non-traditional product formats.

<p>| Table 5 – Overview of Berry Products on the Market |
|-----------------------------|-----------------------------------------------|
| <strong>Product Type</strong> | <strong>Product Details</strong> |
| <strong>Beer</strong> | <em>Wachusett Blueberry Ale</em>[^24^]: Wachusett introduced a blueberry ale back in 2001 that is now brewed and sold year-round; the beer was rated ‘#9 Best Beer in America in 2005’ by Stuff Magazine.[^25]^ |
| <strong>Bread/Bagel (Fresh)</strong> | <em>Blueberry-Acai Bread &amp; Cranberry-Blueberry Bagels</em>[^26^]: Pepperidge Farms launched these products in 2008, but discontinued them a year later. After inquiring about the availability of these products the company stated that they “frequently introduce new products to satisfy consumer tastes for new flavours and variety. However, most supermarkets only have space for a certain number of Pepperidge Farm products, so [they] periodically must review the sales levels of [their] various items and make tough decision to discontinue low selling products.”[^27]^ |
| <strong>Bread/Bagel (Frozen)</strong> | <em>Kraft Blueberry Bagel-fuls</em>[^28^]: Kraft added Blueberry Bagel-fuls to its line of products in 2009 – the product is a “warm toasty blueberry bagel wrapped around a centre of creamy Philadelphia Cream Cheese” that is sold in the frozen food section of grocery stores. |
| <strong>Cat Food</strong> | <em>Blue Beef and Liver Spa Select Entree – Canned Cat Food</em>[^29^]: Blue Beef and Liver Spa Select Entree contains whole carrots, sweet potatoes, cranberries and blueberries. |
| <strong>Cereal</strong> | <em>Monkey Brains Blueberry Oatmeal Cereal</em>[^30^]: Monkey Brains Blueberry Oatmeal is made with 100% whole grain rolled oats, prebiotic fibre, organic cane juice and dried blueberries. The product is supported by IRONMAN Michael Lovato, who claims that it is the “best cereal ever.” |
| <strong>Chocolate Bar</strong> | <em>Laura Secord Chocolates</em>[^31^]: The Laura Secord chain recently indicated that the new owners will introduce anti-oxidant rich chocolates with cranberries and blueberries in a bid to boost business. |
| <strong>Dried Fruit</strong> | <em>Enhanced Wellness Berry Thrive</em>[^32^]: Mariani’s Enhanced Wellness products contain dried fruits with added functional ingredients. <em>Enhanced Wellness Berry Thrive</em> combines cherries, cultivated blueberries and cranberries enhanced with Omega-3. <em>Enhanced Wellness Berry Defense</em> is an antioxidant blend of cherries, whole cranberries, wild blueberries, raspberries and diced dried plumbs enhanced with green tea extract.” |
| <strong>Extract</strong> | <em>Phytonutriance Extracts</em>[^33^]: Diana Naturals (based in France) is extending its range to embrace the trend for organic extracts with the launch of seven new fruit and vegetable products – the company “is a raw materials manufacturer with a food-grade facility focused on all natural, non-GMO products.” “It’s new Phytonutriance range of certified organic extracts, which come in powder form, include acaiola, artichoke, black currant, blueberry, cranberry, orange carrot and purple carrot…. The line is intended for applications in dietary supplements, functional foods and nutritional beverages.” |</p>
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<thead>
<tr>
<th>Product Type</th>
<th>Product Details</th>
</tr>
</thead>
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| Fruit Filling | **Fruit Ease**<sup>24</sup>  
- Steensma, a global producer of ingredients, has developed a new fresh-fruit based ingredient range that is free from artificial additives, allergens and sugar and has a long shelf life.  
- “The fruit ingredients are ideally suited to the chocolate industry as compared to frozen, freeze dried or recombined fruit ingredients in that they are low in moisture content and their original texture is retained” — they are offered as individual pieces of fruit and can easily be divided into chocolate squares.  
- Their “infusion process involves the replacement of water content with fruit concentrates rather than sugar or glucose, which appeals to the growing demand for sugar free and all natural products” — the range includes strawberry, cherry, blueberry and blackberry — all of which can be processed whole or diced. |
| Fruit Filling | **WILD Maximum-Fruit**<sup>35</sup>  
- WILD, the world’s largest private producer of natural ingredients for the food and beverage industry (and manufacturer of Capri Sun drinks), has developed Maximum-Fruit fruit fillings for chocolate bars that enable a fruit content of 25% -- vs traditional 10% standard fruit content in chocolate-filled products in the European Union.  
- According to the company, “blueberry is the perfect complement to white chocolate” and “the high fruit content can be claimed on the packaging, ensuring premium-product positioning.”  
- “Any type of super fruits or products can be used in the fillings, according to the supplier.”<sup>36</sup> |
| Granola | **Yogi Granola Crisps - Mountain Blueberry Flax**<sup>37</sup>  
- These bite-sized granola flakes deliver the health of five ancient grains – oats, barley, spelt, amaranth, and quinoa -- and are sweetened with natural fruit puree and pure cane juice.  
- They are available in three flavours – Fresh Strawberry Crunch, Baked Cinnamon Raisin and Mountain Blueberry Flax. |
| Gum | **Bonus Cranberry Gum**<sup>38</sup>  
- BonusGum (Canadian company) has developed a line of functional chewing gums that include cranberry and green tea flavours – marketed for their antioxidant benefits.  
- Euromonitor reports that out of ‘healthy’ confectionary products, “gum has, perhaps, the most potential, given that it can be used as a platform for any kind of functional ingredient.”<sup>39</sup> |
| Ice Wine | **Blueberry Ice Wine**<sup>40</sup>  
- Crown Bench Estates describes their product as “an opulent combination of Vidal icewine and blueberries.”  
- The product boasts an International Gold Medal and is sold for $34.95/375mL. |
| Juice | **Ocean Spray Blueberry Juice Cocktail**<sup>41</sup>  
- “PepsiCo and Ocean Spray have added more single-serve juices and juice drinks to their three-year old sales and distribution agreement.”  
- “Ocean Spray will be adding blueberry flavour to its portfolio next year, and so under the agreement PCNAB will also distribute a 15.2-ounce blueberry juice cocktail.” |
| Juice | **PureBlue Superjuice**<sup>42</sup>  
- With the increasing trend towards incorporating superfruits into the diet, this company has positioned its product as a functional superjuice that is “made from just five premium ingredients, all of which are considered SuperFruits for their rich antioxidant levels” – these fruits include wild blueberries, merlot grapes, syrah grapes, sauvignon blanc grapes and black currants.  
- The bottle states that it contains 1 ½ servings of fruit, has no added sugar or preservatives and is 100% juice that is 100% natural – it also states clearly on the front of the bottle that it contains “over 750mg of Polyphenols per bottle.” |
| Liqueur | **Blueberry Organic Artisan Liqueur**<sup>43</sup>  
- These USDA certified organic liqueurs produced by Thatcher’s come in a range of flavours including Blueberry, Elderflower, Cucumber, Apple Spice Ginger, Pomegranate, Tres Chili and Dark Chocolate.  
- The products contain no artificial flavours, preservatives or colours and the ingredients are “sustainably farmed by a trusted grower.” |
<table>
<thead>
<tr>
<th>Product Type</th>
<th>Product Details</th>
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| Lozenge      | *Immunity Take Care Lozenges*<sup>64</sup>  
  - New Chapter has developed a lozenge with Elderberry extract and natural blueberry flavours to enhance immune systems. |
| Meat Kebab   | *Rakvere Kebab with Blueberries*<sup>65</sup>  
  - Rakvere Lihakombinaat launched 8 new products to the Estonian market in 2008, including a blueberry kebab. The company promotes the blueberry kebab to health-conscious consumers and claims to be the first company in Estonia to use blueberry as an antioxidant and functional additive. |
| Pate         | *Patchwork Chicken Liver, Bourbon and Blueberry Pate*<sup>66</sup>  
  - Welsh pate producer, The Patchwork Traditional Food Company, has begun producing its famed chicken liver pates in the United States and is looking at potential markets in Canada. One flavour combination brings together chicken liver, sweet blueberries and bourbon. |
| Peanut Butter| *Zap Natural Peanut Butter*<sup>67</sup>  
  - One 12 ounce jar of Zap Natural Peanut Butter contains a blend of 10 natural vegetables and fruits, including blueberries, spinach, carrots, strawberries and cherries. The product claims to have an antioxidant value of 1,100 per serving. |
| Snack Bar    | *SOYJOY Blueberry*<sup>68</sup>  
  - Otsuka Pharmaceutical Co., Ltd. in Japan announced the addition of this product to its line of SOYJOY products in September 2009 – it is “a wheat-free bar-type nutrition product baked from dough made of powdered whole soybeans (hulled soybeans), with the addition of generous amounts of sweet-tart blueberries and white chocolate chips.”  
  - SOYJOY was originally launched in Japan in April 2006 as a way to promote the benefits of soy, and is currently available in seven countries and regions. |
| Spread       | *Crofter’s Superfruit Spreads*<sup>69</sup>  
  - Crofter’s has developed a line of superfruit spreads that are “stuffed with 1 pound of premium organic fruit,” are “sweetened with fair trade sugar” and “contain one-third less sugar than jam.”  
  - The products are “sourced from around the world” with an Asian spread, Europe spread, South America spread and a North America spread – the North America spread contains wild cranberries and blueberries blended with red grapes and morello cherries – the company highlights the health benefits that arise from the antioxidants and vitamins in these fruits. |
| Spread       | *Blueberry with Ice Wine Preserve*<sup>70</sup>  
  - “Prized by blueberry connoisseurs, Kincades small batch, Blueberry with ice Wine Preserve is an exquisite combination of wild, juice blueberries artfully blended with the rich and sweet ambrosia of Canadian Ice Wine” – the wine preserve is ideally suited for: waffles, pancakes, ice cream or with an older Cheddar on crackers.  
  - The product is offered in a 250ml glass jar for $7.00 CDN. |
| Sugar        | *Essential Cane Flavoured Cane Sugars*<sup>71</sup>  
  - Essential Cane sells flavoured cane sugars produced without preservatives, additives, essential oils or artificial colours and flavours – their new flavours include tangerine, lemon, lime, wild blueberry, raspberry, vanilla bean, espresso, sweet onion, and green chilli. |
| Tea          | *TrueBlueberry Herbal Tea*<sup>72</sup>  
  - Celestial Seasonings claims that “the wild blueberries [they] chose for this blend are very high in antioxidants and have overtones of purple grapes, providing a deeper berry flavour than their farmed cousins.”  
  - This is a clear example of how wild blueberries are being positioned as healthier alternatives to cultivated blueberries – which is likely to have a negative impact on demand for B.C. blueberries. |
| Tea          | *Ishukshuk Blueberry Icewine Tea*<sup>73</sup>  
  - This premium Ceylon Inukshuk Tea has natural blueberry and Ice Wine flavours. |
| Tortilla Chips| *R.W Garcia Special Recipe Tortilla Chips*<sup>74</sup>  
  - R.W. Garcia tortilla chips are made from organic and wholesome ingredients, including dehydrated berries, and contain no trans fats, cholesterol, wheat or gluten. |
OPPORTUNITIES TO UTILIZE BLUEBERRIES AS SUBSTITUTES FOR EXISTING PRODUCTS

An excellent opportunity is emerging for blueberry colour pigments to be utilized as substitutes for artificial colours. According to colour specialist J.L Morton, blue food is a rare occurrence in nature and, aside from blueberries and a few blue-purple potatoes, “blue just doesn’t exist in any significant quantity as a natural food colour.” Companies restricting themselves to naturally-sourced ingredients have struggled for some time to achieve acceptable blue colours. As one of the few blue foods naturally occurring in nature, blueberries “have been identified as a source of commercially viable natural colourings” and “the blueberry pigment cyanidin glucoside [...] has demonstrated a high level of consistency and stability in beverages.” According to a recent study from Slovenia, “a comparison of different compounds in blueberries called anthocyanins, responsible for the berry’s colour, showed that each anthocyanin had different degradation rates and identified cyanidin glucoside as the most stable natural colourant.”

The demand for naturally-sourced added food colourings is also being enhanced by legislation expected to be in place across Europe in 2010. The new legislation requires any product that contains certain artificial colours that are known to cause behaviour problems (Sunset yellow, Quinoline yellow, Carmoisine, Allura red, Tartrazine and Ponceau) to have a warning label saying ‘may have an adverse effect on activity and attention in children.’ Analysts at Euromonitor note that “the consequence of such labelling is similar to a ban, and it leaves the industry with little choice but to eliminate the suspect food colours as quickly as possible.” As more attention is drawn to issues such as these, it is possible that demand for naturally-sourced added food colourings could grow in the future.

As a result of the health benefits associated with consuming blueberries, there also exists opportunities to utilize blueberry extract as a substitute for artificial flavourings or as a functional additive to enhance the health properties of other products. Researchers from the University of Maine recently conducted a study that looked at the integration of blueberry puree into soy-based burgers to increase phytochemical levels and improve health. Their results indicated that by adding blueberry as a functional ingredient, “the phenolic and anthocyanin counts were significantly higher in the soy-blueberry burgers.”

Since the first organic-pigment derived solar cells were invented in the 1990s, researchers have also been looking at ways that blueberry colour pigments could be used as a substitute for silicon in solar panels. The anthocyanin compounds in blueberries may eventually be utilized in the sensitizer dye that is put on the outer layer of solar panels, responsible for transferring electrons from the sun’s solar energy onto the semi-conducting layer inside the panel. Solar panels constructed in this manner would be cheaper and more flexible, possibly leading to the development of transparent solar sheets. Currently this technology does not convert solar energy as well as silicon-based solar panels, but researchers expect this to change in the distant future.

Another possible opportunity for blueberries is showcased in a recent study that claims that active compounds from biotransformed blueberry juice may eventually be utilized as substitutes for existing anti-obesity and anti-diabetic medications or products. Canadian researchers conducted a study using blueberry juice that had undergone a transformation using the Serratia vaccinii bacterium (a strain isolated from the blueberry flora), which they claim “may represent a novel therapeutic agent, since it decreases hyperglycemia in diabetic mice and can protect young pre-diabetic mice from developing obesity and diabetes.” The researchers state that “mice prone to obesity, insulin resistance, diabetes and hypertension drinking biotransformed blueberry juice were protected against the development of glucose intolerance and diabetes melitus.”
MAJOR TRENDS THAT COULD POSITIVELY AFFECT FUTURE DEMAND FOR BLUEBERRIES

*Increased Demand for Superfruits*

Superfruits are being incorporated into everything from chewing gum to soft drinks in an attempt to enhance their appeal to health-conscious consumers. According to *New Nutrition Business* editor Julian Mellentin, superfruits are “cashing in on changing consumer preferences, particularly among young people who seek convenience and so choose an acai juice over eating an apple or a pear.” Although many new superfruits are being identified each year, and some consumers are choosing these over blueberries simply because they are novel and exotic flavours, blueberries should continue to benefit from their long history on the market as they are easily identifiable to consumers and are backed by a greater array of scientific evidence.

*Increased Demand for Functional Ingredients*

The trend towards living a naturally healthy lifestyle – where consumers are increasingly moving away from quick-fix dietary supplements towards the consumption of naturally healthy foods – is driving demand for ingredients, such as blueberries, which have intrinsic health benefits. Mintel’s market analysts predict that this trend is set to continue and “there is likely to be a move away from some health ingredients that may not be backed by sufficient clinical evidence towards naturally good sources of food that are well understood by consumers and do not require complex explanations or claims.” Blueberries should benefit from this as they have been long known for their health benefits and have strong support from such organizations as the New York State Dietetic Association, which ranks blueberries third in its list of the top 5 functional foods in the world after salmon and oats. Euromonitor reports that “ingredient categories with health and wellness benefits are projected to perform best within packaged foods, with botanicals and other plant extracts projected to see very good growth.”

*Move Away from Artificial Colours*

The ‘clean label’ trend began around 20 years ago, but is now gaining greater momentum as natural colours are emerging as the new generation of functional ingredients. Euromonitor analysts expect that the “now common label statement ‘free from artificial colours’ will eventually turn into ‘with natural colours made from blueberries (or other source material)’, in conjunction with one or several health benefit claims, either implicitly stated or implied.” They report that demand for natural colours already outstrips supply and “black and blue colour pigments, for example those in blueberries, tend to achieve top scores in ORAC tests.” The challenge now is that these value-boosting functional colourings still have to ‘pay their way’ due to their substantially higher cost (generally between 10 and 20 times the price of synthetic).

*Emergence of ‘Healthy Colours’ Products*

In addition to the move away from artificial colours, some companies (i.e. Fiorio Colori, Parmalat, Kagome) are using colour cues to attract consumers to healthier products. By extracting colours from superfoods, such as blueberries, and incorporating them into drinks, soups or other products, these companies are able to market their products based on the common understanding that brightly-coloured fruits and vegetables are the healthiest options. As an example, Parmalat launched a line of juices in 2007 that attributes specific health and wellness properties to each product. The company states that “its green juice protects eyesight, the red juice aids blood circulation, blue prevents cellular ageing, yellow boosts the immune system and white ensures regular bowel movements.”
**Oxygen Radical Absorbency (ORAC) Labelling**

As mentioned earlier, the move towards ORAC labelling would enable blueberries to be positioned as a premium product relative to most other fruits and vegetables because of their strong antioxidant power. This is expected to increase demand for blueberries, but will also put pressure on processors to develop ways to incorporate blueberries into processed food products without losing their antioxidant potential.

**Ageing Populations**

As the population of post-WWII baby boomers enter into retirement age the demand for healthy products that help with eyesight and brain function, such as blueberries, will likely increase. Recent studies have claimed that certain compounds within blueberries are effective in reducing damage caused to brain vessels from a high-cholesterol diet and that consuming blueberries for only 12 weeks may boost memory in older people. As more studies come to light about how consuming blueberries can help combat dementia, Alzheimer’s and cognitive decline, demand for functional blueberry products is set for strong growth. Analysts at Leatherhead Food Research indicate that “phospholipids... antioxidant vitamins and polyphenols are the most likely ingredients for developing foods aimed at improving cognitive function and memory,” and that Japan is the key market for brain-health product development. As the population of people aged 65 and older continues to expand in B.C. (from 15% of the population in 2009 to 23% in 2030), manufacturers will also have an excellent opportunity to test new brain-health related products locally before exporting them to foreign markets.

**New Investments in Research and Development**

Increasingly intense competition for the highest-quality fruit and vegetables is leading to the development of new technology that can enable fruit to maintain quality and remain fresh longer. As an example, researchers from Agriculture and Agri-Food Canada’s Atlantic Food and Horticulture Research Centre recently developed a new processing machine called the LT3, which stands for Low Temperature Thermal Treatment. The treatment process using the LT3 “helps to activate chemical processes in the fruits and vegetables to help improve colour, flavour and quality.” As more technology of this nature is developed and utilized in Canada, demand for Canadian fruits should increase as they will be considered premium quality products to those produced in less technologically advanced countries.

**Increased Demand for Local Foods**

As a result of growing concerns about global warming, food security and ethical sourcing, Canadians are increasingly looking for ways to consume more locally-produced products. According to the National Restaurant Association survey of American Culinary Federation member chefs, which collects culinary forecasts and menu trends predictions from 1,800 professional chefs each year, “the top 5 trends [for 2010] are locally grown produce; locally sourced meats and seafood; sustainability as a culinary theme; mini-desserts; and locally produced wine and beer.” By educating consumers on the availability of B.C. blueberries year round, and linking the consumer to the farmer through innovative marketing techniques, growers could further enhance demand within the local market.
FOREIGN MARKET ANALYSIS

Gordon Richardson, author of *An Export Marketing Strategy for the British Columbia Highbush Blueberry Industry*, reports that initial market development efforts should focus on regaining market share in Japan, developing the market in China and taking advantage of emerging opportunities in India. The following analysis is intended to help B.C.’s blueberry industry identify opportunities for growth within these markets and formulate effective marketing strategies moving forward.

REGAINING MARKET SHARE IN JAPAN

Market Overview

Economic Snapshot

Japan’s gross domestic product has declined by 4.3% since 2004, dropping to $5,103.3 billion in 2009. With a population of 127.6 million people, this breaks down to a GDP per capita of $39,996. The gross domestic product in terms of purchasing power parity was $4,166.5 billion in 2009 – or $32,654 per capita.

According to the CIA World Factbook, Japan is ranked 74th out of 133 countries in regards to the degree of inequality in the country’s distribution of income, as measured by the Gini coefficient. In comparison, China is ranked 56th, India is ranked 79th and Canada is ranked 100th. This indicates that, while Japan has historically been known as a ‘90% middle-class society’, there is now a growing divide between the rich and poor.

Blueberry Market Snapshot

Blueberries are brought into Japan from the U.S., Canada, Chile, Mexico, Argentina, Australia, New Zealand and China. Japanese blueberries are available as well, but are not viewed as highly in the marketplace due to the high rainfall at harvest compared to other countries. Although the United States and Chile are the main providers in terms of quantity of blueberries to the Japanese market, Australia benefits from its close distance to the market and its excellent reputation of providing ‘clean’ product. One blueberry importer, Funasho Shoji Co, reports that they prefer not to import from Chile until product from Australia is no longer available, as they indicate that customers prefer the sweet quality of Australian product. They say that the problem with Chilean fruit is that the greater variation in temperature during transportation leads to lower quality blueberries with a shorter shelf life. To combat this, some Chilean producers ship direct to Tokyo by cargo ship – even though it takes 25 days – because the end result is a better quality fruit at a cheaper transport cost than blueberries flown through Los Angeles (U.S.), Sydney (Australia) or Africa.

Import statistics provided through Global Trade Atlas classify fresh blueberries under the grouping ‘cranberries, bilberries and other fruits of the Genus Vaccinium,’ which makes it difficult to ascertain exactly how many blueberries are coming from each country. Based on this data, Japan imported a total of 1,225 metric tonnes of fresh berries in 2009 – 526 from the U.S., 395 from Chile, 139 from Australia, 76 from Canada and 45 from Argentina. B.C. exported 71 metric tonnes of fresh cultivated blueberries to Japan in 2009.

Import statistics provided through Global Trade Atlas classify frozen blueberries under the grouping ‘berries, no added sugar.’ Based on this data, Japan imported a total of 11,790 metric tonnes of frozen berries in 2009 – 6,828 from Canada, 4,122 from the U.S., 497 from Sweden, 88 from China and 65 from Finland. B.C. exported 1,283 metric tonnes of frozen cultivated blueberries to Japan in 2009.
**CONSUMER PROFILE**

**TABLE 6 – JAPANESE CONSUMER PROFILE**

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<tr>
<td>Avg. Annual Gross Income</td>
<td>US$ 34,952.00</td>
<td>US$ 37,990.10</td>
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<td>8.7%</td>
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<td>Avg. Disposable Income</td>
<td>US$ 25,501.30</td>
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<td>Avg. Consumer Expenditure on Food</td>
<td>US$ 3,064.80</td>
<td>US$ 3,187.00</td>
<td>-6.7%</td>
<td>4.0%</td>
<td>-1.4%</td>
<td>0.8%</td>
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<td>Avg. Consumer Expenditure on Fruit</td>
<td>US$ 144.70</td>
<td>US$ 143.80</td>
<td>-9.8%</td>
<td>-0.6%</td>
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<td>% of Households with Freezer</td>
<td>38.6%</td>
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<td>15.1%</td>
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<td>% of Households with a Fridge</td>
<td>98.6%</td>
<td>98.7%</td>
<td>0.2%</td>
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<tr>
<td>Average Age of Population</td>
<td>43.8</td>
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<td>3.9%</td>
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<td>0.6%</td>
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<tr>
<td>% of Population Aged 65+</td>
<td>22.7%</td>
<td>26.0%</td>
<td>16.6%</td>
<td>13.2%</td>
<td>3.1%</td>
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*Source: Euromonitor (Note: figures for 2009-2014 based on March 2010 Euromonitor forecasts; all data based on fixed 2009 exchange rates)*

**Population Demographics**

As shown in Figure 1, Japan is undergoing a massive shift in population demographics that began back in the mid-1900s. After contraception became widely available to the general population and abortion was legalized, the age-sex composition began to shift from a normally shaped pyramid – with the majority of young people at the bottom and fewer and fewer people with age – to the rectangular-shaped population diagram of today. Despite Japan’s efforts to increase the birth rate, it is expected that this shift will continue until the population pyramid is fully inverted in the middle of the century. As the population ages dramatically over the next few decades, it is expected that the products that are most successful in this market will be aimed at serving this ageing population.

**Figure 1: Japanese Population Pyramid**

![Figure 1: Japanese Population Pyramid](source: Statistics Bureau, MIC; Ministry of Health, Labour and Welfare.)
Household Profiles
As a result of the increasing trend towards living a more individual lifestyle, the structure of a typical Japanese household continues to change. The number of single-person households has dramatically increased over the past 10 years (to 14 million in 2009) and is projected to become the most popular type of household in Japan. With an increasing number of single-person households, it can be expected that demand will increase for food service – as socialising in Japan rarely occurs without consumption of food – and consumption within the house will include preferences towards convenience foods served in smaller packages. It is also important to note that many of these single-person households will house the expanding number of elderly Japanese people who no longer have the option to live with family members. As younger Japanese are increasingly unwilling to house their elderly relatives in favour of private homecare or nursing homes, a larger number of elderly people will be responsible for making more of their own food consumption and shopping decisions.81

Shopping Habits
With the recent economic downturn leaving its impact in Japan there is now a growing demand for budget, economy and private-label items, which have not been so popular with consumers in the past. The matriarch of the family has traditionally been responsible for shopping for food on a daily basis, but this role is increasingly giving way to weekly or fortnightly shopping involving the whole family. This has led to increased purchases of foods marketed towards young children, such as sweets and confectionary, and more shopping at supermarkets, which has now become the most popular distribution channel for food shopping in Japan. Although most Japanese consumers still demand fresh produce, increased purchases at supermarkets has lead to a greater reliance on processed and frozen produce.82 However, because kitchens tend to be more compact and food storage in the home is minimal, there is less emphasis on stored non-perishables, refrigerated and frozen goods – even though 98.6% of households have a fridge and 38.6% have a freezer.

Eating Habits
As traditional Japanese consumption patterns head in a more western-influenced direction, spending on fish and seafood is decreasing and the requirement for fresh produce is facing competition from the emerging processed, frozen, packaged and ready-made meals of convenience. Typically, Japanese people eat three main meals – breakfast, lunch and dinner – with one regularly eaten outside the home. Breakfast usually comprises a bowl of rice, a soy-based soup and a side dish such as a grilled fish, seaweed or an omelette, but many consumers are moving towards cereals and breakfast bars (even though eating in public whilst on the move is still frowned upon in Japan). Lunch will usually consist of a quick, ready-made meal (such as a bento box) that is often prepared at home or purchased through food service outlets. Dinner, which is considered by most Japanese to be the most important meal of the day, is usually consumed with friends, colleagues or family. Although this has traditionally involved eating out, which is supported by the plethora of cheap food-service outlets and the difficulty procuring fresh food in a time-crunch schedule, more and more families are choosing dinner as the one meal of the day to prepare and consume in the household.83
**Major Trends Within the Market**

**Rapidly Ageing Population**
As mentioned earlier, Japan is experiencing a massive shift in population demographics that will result in 26% of the population being 65 years or older by 2014. Already, the nation’s population of over-60s hold three-fifths of the total household savings, which has led to an increased focus on developing products that cater to this new aged core market. With the average age of the population already exceeding 43 years, and rising concerns about the ability of the country to properly care for this ageing population, the Ministry of Health has introduced compulsory health checks aimed at pushing responsibility for one’s health back onto the individual. As a result of this increased emphasis on prevention, health-oriented foods such as low-salt and low-fat content varieties have increased in popularity as people try to ensure that they aren’t levied a larger national insurance payment or fine at their next health check.84

**Income Disparity**
In the past, the vast proportion of Japanese ranked themselves amongst the middle classes. However, as a result of the ageing population and the effects of the long-term recession in Japan’s labour market, salaries for many people are dropping and a growing divide is emerging between the rich and poor. The market is adapting to this trend by splitting the market into a definite low-priced, budget sector, and a premium, value-added sector. Supermarkets are able to fill the needs of the growing budget sector, whereas branded and high-end speciality stores are able to cater to the consumers seeking premium quality. There also exists a disparity within individual consumption habits, as many consumers are looking to economise in some areas while spending heavily on items that they desire most. Analysts at Euromonitor expect that “there will always be a need for exclusivity and differentiation in Japan, as luxury spending on cars, holidays and high-end fashion filters through to smaller luxuries such as cosmetics, portable electronics, food and drink.”85

**Reduction in Overtime**
For the past ten years policymakers in Tokyo have been trying to transform Japanese society into a leisure and lifestyle superpower. This led to a reduction of working hours across Japanese offices and classrooms, and the promotion of a better work-life balance. While the result of these policies were only beginning to take effect before 2008, the current economic downturn has sped up this process and is having a dramatic effect on the number of overtime hours worked. Many companies are facing increasing cost pressures, but fear losing face if they lay off any employees. Instead, many are looking at other ways to reduce staffing costs by implementing a no overtime policy. As a result of these policies “fewer people are staying late in offices, resulting in reduced consumption of snack bars, which some people eat to keep them going when working long hours.” The requirement for people to go home after official working hours has also resulted in more people coming into work earlier, which has led to increased demand for convenient breakfast foods that can be eaten as a snack early in the morning.86

**Westernized Eating Habits**
The greater propensity to live a Western lifestyle is having a negative impact on consumer health. With increased consumption of dairy products, red meat and cholesterol-laden foods, cancer-related deaths climbed an alarming 17% over the past decade.87 As the government continues its promotion of preventative health care and educates more consumers about the correlation between diet and health, it could lead consumers to revert back to more natural, fresh products, such as blueberries, that are believed to fight diseases.
**Food Industry Overview**

The following sector profiles provide broad-level overviews of the areas in this market where opportunities for blueberries may exist. These overviews are intended to help the B.C. blueberry industry identify the expected level of growth and popular products present in each sector. Where possible, information has also been provided on consumer preferences and trends that are driving product development, and the key competitors in these markets.

**Baked Goods**
The baked goods sector showed a value decline of 4.7% in 2009 and is expected to decline by an average of 1% annually between 2009 and 2014. The market is dominated by domestic brands, with Yamazaki Baking Co Ltd continuing to lead with a 19% value share in 2008. To combat rising wheat prices and the current economic downturn, manufacturers have been offering smaller packaging to achieve higher margins (as the unit price of smaller packs is higher) and to enable consumers to minimize one-time spending.

It is estimated that about 40% of imported blueberries are sold to cake decorators and jam manufacturers in Japan, with the other 60% going to large supermarkets. As a result of increased consumer interest in blueberries, cake manufacturers are willing to pay premium prices for smaller blueberries of high quality. Euromonitor reports that the benchmark price that consumers are prepared to pay for cakes is around ¥400 ($4.50). They note that two-piece packs priced around ¥300 ($3.40) are very popular and cakes priced above ¥400 are struggling to sell in the current economic climate. Opportunities may exist for the B.C. blueberry industry to increase supply of fresh blueberries to Japan’s cake manufacturers, but the expected growth decline in this sector will likely lead to increased competitiveness within the market.

**Biscuits**
As consumers look for cheaper dessert alternatives in the current economic climate, the volume of biscuits sold in Japan is expected to increase by 2% annually between 2009 and 2014. With more consumers looking to replace higher priced sweets and snacks, sweet biscuits have performed better than savoury biscuits, with chocolate coated biscuits seeing the fastest volume growth in 2009, at 2%. Japanese consumers tend to prefer biscuits with added value, such as filled biscuits, rather than plain. These consumers can be broadly placed in two categories: family users – who are more cost conscious and are shifting to value for money products – and personal users – who are less conscious of price and tend to drive growth in innovative products and new flavours. Some manufacturers have been successful at applying a Japanese sweet flavour in a Western product, and Euromonitor believes that this strategy will likely be adopted by more manufacturers in the next five years. Opportunities may exist for the B.C. blueberry industry to supply filled-biscuit manufacturers with processed berries. By capitalizing on the rising demand for healthier snack foods, these manufacturers may be interested in increasing the health profile of their products by integrating blueberries as a functional ingredient.

The market for biscuits is currently dominated by domestic players, with the top five players accounting for 61% of the market. Ezaki Glico Co Ltd, manufacturers of the popular chocolate-coated biscuit brand Pocky, continued to lead the sector with a 17% value share in 2008. Pocky biscuits come in a wide-range of flavours, including blueberry, strawberry, milk, fudge and pumpkin.
Breakfast Cereals
Although volume and value sales increased by 1% and 3% respectively in 2009, Euromonitor analysts believe that the breakfast cereals market is always likely to be somewhat limited because cereals are not a traditional Japanese product. With a 40% value share in 2008, Kellogg (Japan) continues to be the leading player in this market and is achieving success by repositioning their cereals as products for all occasions, not only as breakfast foods. The company successfully launched its Special K Red Berry cereal in early 2008, both in a flake version, which appealed to consumers looking for convenient breakfast food, and a biscuit type sold in individual packs, which appealed to busy young female consumers who purchased the product for a morning or afternoon snack. In addition to the success of Special K Red Berry products, Kellogg’s Fruit Granola was the fifth largest in cereal brand shares in 2008, accounting for 3.30% of the retail market value of all breakfast cereals.

Fruit/Vegetable Juice
The low birth rate in Japan is starting to affect demand for fruit and vegetable juices, as children are typically the main consumers of juice drinks and nectars in the country. However, with the growing health and wellness trend making its impact, demand is expected to widen as other consumers look for products that offer freshness, lower sugar contents and lower calorie levels.

Within the fruit/vegetable juice market there are very few premium products, with competition instead focusing on mid-priced brands and niches. The most successful niche products have been those targeted towards adult women who are conscious of their health and beauty. Smoothie products are still not taking hold in Japan, with the small market of current consumers preferring to purchase smoothies from foodservice outlets over packaged smoothie products found in the supermarket.

Euromonitor analysts anticipate that “consumers will shift from reconstituted 100% juice to not from concentrate 100% juice during [the next five years], as players seek to attract consumers by launching and promoting not from concentrate 100% juice as a more natural product.” They also note that “there is clear split between not from concentrate 100% juice and reconstituted 100% juice in terms of chilled and ambient storage. Not from concentrate 100% juice is entirely stored and sold as chilled, with chilled juice having a more premium and fresher image. Reconstituted 100% juice is meanwhile entirely sold as ambient.” As the health and wellness trend grows, it is expected that juice drinks will see the strongest performance in total volume terms over the next five years, with sales growing by 16%. Leading flavours for 100% juice in 2008 were apple, grape, grapefruit, mikan, mixed fruits, orange, peach, pineapple and tomato. Leading flavours for nectars in 2008 were apple, grape, grapefruit, mikan, orange, peach, pear and plum.

Snack Bars
The snack bars sector achieved volume and value growth of 1% and 2% respectively in 2009, with breakfast bars leading the pack. With 44% share of the snack bar sales in 2008, Otsuka Pharmaceutical Co Ltd continued to be the largest player in the market. As the pioneer of the snack bar sector in Japan, Otsuka’s Calorie Mate and SOYJOY snack bars remain very popular among consumers. Although there are international brands present in the market, most are parallel imports and are sold only at high-end supermarkets and imported food specialists. Most consumers purchase snack bars for their own consumption, which has resulted in very little presence of private label brands in this sector as price is a secondary consideration to trendiness and originality. Looking forward, snack bars sales are predicted to continue to increase, while granola bars are expected to show the fastest volume growth within the sector. Opportunities may exist for the B.C. blueberry industry to supply blueberries as a functional ingredient for snack bar manufacturers in Japan.
**Spreads**
The spreads sector achieved volume growth of 3% in 2009, with jams and preserves leading the way at 4%. With more consumers eating in instead of eating out, consumption of jam has increased as it is the most popular spread among Japanese consumers. Strawberry is the most popular flavour, followed by blueberry (ranked 2nd every year since 2005) and orange. Jams and preserves are expected to continue showing strongest volume growth moving forward, mostly driven by an ageing population who consume softer foods such as bread.100

Domestic companies dominate this market, accounting for 60% of sector value in 2008. International brands control a very minimal share of the market and the current economic downturn has resulted in consumers shifting away from imported products due to their significantly higher prices. Consumers are increasingly looking towards private label spreads as they do not feel the need to be so brand-oriented and are not ashamed of trading down with these types of products. Euromonitor notes that a “strategy that premium product manufacturers might consider is to provide slightly higher quality private label products, as consumers are likely to be willing to spend extra for better quality private label products that can compete with standard quality branded products.”101 As consumers move away from imported spreads, opportunities may exist for the B.C. blueberry industry to supply more blueberries to Japanese manufacturers of private-label spreads.

**Sweet and Savoury Snacks**
The sweet and savoury sector comprises an assortment of products, but fruit snacks and cup jelly products remain the most popular. Most products included in this sector are not perceived as particularly healthy, and with the growing trend towards health and wellness this has led to some products, such as fruit snacks, being more successful than others. Instead of giving up sweet and savoury snacks altogether, many health conscious young women have shifted consumption to fruit snacks due to their higher nutritional content. Euromonitor analysts expect that fruit snacks will be the most dynamic niche within this sector over the next five years.102 Opportunities may exist for the B.C. blueberry industry to develop functional blueberry snacks that can capitalize on the trend towards healthier products in this market.

**Yoghurt**
The yoghurt sector achieved value growth of 2% in 2009, with fruited spoonable yoghurt showing the fastest value growth at 3%. While drinking yoghurt is struggling due to high competition from other beverages that are better at quenching thirst, spoonable yoghurt achieved a retail volume increase in 2009 as consumers shifted from traditional desserts to healthier alternatives. As the government’s new health policy and the rapidly ageing population continues to impact consumer preferences, Euromonitor predicts that fruited spoonable yoghurt and probiotic/prebiotic spoonable yoghurt are expected to show the strongest growth over the next five years. Blueberry has been the leading flavour of fruited spoonable yoghurts since 2006. The leading flavours in 2009 were blueberry, apple, strawberry, peach and mango.103

Local brands dominate the yoghurt sector in Japan, with Danone Japan Co Ltd being the largest international player with its 4% market share. The leading company, Yakult Honsha Co Ltd, held a 25% value share in 2008. Euromonitor expects these major players to launch more sugar-free and fat-free products, as well as alternative plant-based products, over the next few years.104 Opportunities may exist for the B.C. blueberry industry to supply more blueberries to Japanese manufacturers of fruited spoonable yoghurt.
DEVELOPING A MARKET IN CHINA

MARKET OVERVIEW

Economic Snapshot
China’s gross domestic product has increased by 103% since 2004, reaching $4,757.3 billion in 2009. With a population of 1.328 billion people, this breaks down to a GDP per capita of $3,582. The gross domestic product in terms of purchasing power parity was $8,734.9 billion in 2009 – or $6,577 per capita.\textsuperscript{105}

According to the CIA World Factbook, China is ranked 56\textsuperscript{th} out of 133 countries in regards to the degree of inequality in the country’s distribution of income, as measured by the Gini coefficient. In comparison, Japan is ranked 74\textsuperscript{th}, India is ranked 79\textsuperscript{th} and Canada is ranked 100\textsuperscript{th}. Out of the three countries reviewed in this report, China has the greatest degree of income inequality.\textsuperscript{106}

Blueberry Market Snapshot
Although China’s blueberry production acreage increased by 410% between 2005 and 2007, the industry has been very slow to get off the ground as a result of infrastructure and production issues. Despite these challenges, agricultural production is expected to continue to increase after the government spent an additional 121 billion yuan ($18.54 billion) in 2009 to help increase farm yields and boost rural incomes across the agriculture sector.\textsuperscript{107} In December 2009, China Organic Agriculture Inc. (COA) announced that it has entered into an agreement to acquire 60% of Chaingbai Eco-Beverage Co. Ltd. – a well known blueberry product producer and distributor located in China’s Jilin province. According to a press release on FoodBizDaily.com, “Chaingbai currently distributes its products within three provinces in north-eastern China and plans to expand into other regions over the next two years” by utilizing China Organic Agriculture’s countrywide sales network.\textsuperscript{108} B.C. faces competition in China’s frozen blueberry market from the U.S., Sweden, Poland and the Ukraine.\textsuperscript{109}

CONSUMER PROFILE

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<tr>
<td>Avg. Annual Gross Income</td>
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<td>US$ 3,909.30</td>
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<td>75.2%</td>
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<td>US$ 2,055.90</td>
<td>US$ 3,585.00</td>
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<td>74.4%</td>
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<td>Avg. Consumer Expenditure on Food</td>
<td>US$ 403.00</td>
<td>US$ 615.40</td>
<td>55.8%</td>
<td>52.7%</td>
<td>9.3%</td>
<td>8.8%</td>
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<td>Avg. Consumer Expenditure on Fruit</td>
<td>US$ 34.20</td>
<td>US$ 58.70</td>
<td>73.4%</td>
<td>71.3%</td>
<td>11.6%</td>
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<td>% of Households with Freezer</td>
<td>4.3%</td>
<td>4.7%</td>
<td>18.8%</td>
<td>10.9%</td>
<td>3.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td>% of Households with a Fridge</td>
<td>60.1%</td>
<td>68.0%</td>
<td>26.6%</td>
<td>13.2%</td>
<td>4.8%</td>
<td>2.5%</td>
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<tr>
<td>Average Age of Population</td>
<td>36.8</td>
<td>38.5</td>
<td>6.5%</td>
<td>4.6%</td>
<td>1.3%</td>
<td>0.9%</td>
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<tr>
<td>% of Population Aged 65+</td>
<td>9.6%</td>
<td>10.6%</td>
<td>15.3%</td>
<td>13.1%</td>
<td>2.9%</td>
<td>2.5%</td>
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Source: Euromonitor (Note: figures for 2009-2014 based on March 2010 Euromonitor forecasts; all data based on fixed 2009 exchange rates)
Population Demographics

China’s one-child policy controlled a population explosion in the 20th century but has now left the country with a rapidly ageing population that is expected to put massive strain on the country’s social and economic systems. China’s population is expected to shift from the normally-shaped population pyramid of today – with the majority of young people at the bottom and fewer and fewer people with age – to a more inverted-shaped population pyramid by 2050 (as shown in Figure 2). Editor of Forbes, Paul Maidment, reports that “by 2050, China’s seniors alone will likely constitute a larger nation than all Americans today.” According to the US-based Center for Strategic and International Studies “there will be just 1.6 working-age adults to support every person aged 60 and above [in 2050], compared to 7.7 in 1975.” Like in Japan, this shifting age demographic is expected to drive demand for healthy products that are aimed at serving this ageing population.

Household Profiles

As a result of increased migration from rural to urban areas, “the number of two-person households jumped by a drastic 95% from 1995 to 2007, with single-person occupancy soaring 74% over the same period.” Within rural areas, traditional familial customs of housing large families under the same roof is still the common norm. However, as more and more students move to the city and are influenced by other cultures and experiences, the young working class is becoming more inclined to maintain their urban living arrangements into their professional lives. As a result, single-person households are expected to be the fastest growing segment in China until at least 2015.

Shopping Habits

Unlike in the West, Chinese consumers will typically conduct daily trips to the market to purchase the food required for each day’s meals. This is a result of strong consumer preferences towards fresh food, a plethora of open-air food markets and a lack of storage space within the household. Consumers demand high quality at competitive prices and will almost always choose the freshest products available when shopping or eating out. This can be seen within restaurants, where live fish are brought to the table before being cooked for guests to prove they are fresh, or in supermarkets, where live cages full of seafood are on display for consumers to choose the freshest product before being processed and packaged on the spot. Consequently, processed and frozen produce is not generally as popular with consumers, although this is slowly changing. Euromonitor analysts expect that more consumers will be forced to choose more processed foods in the future, “as lifestyles dictate that many just will not have the time, or the ability, to prepare and cook fresh produce at home.”
The biggest challenge for Chinese consumers is a lack of space. Although 60.1% of households have a refrigerator, they are generally smaller and lack the space required to stock up like Western consumers do. As well, with only 4.3% of households owning a freezer the majority of frozen food purchases are consumed within a few days of purchasing, if not the same day. In addition to a lack of space, consumers usually walk several blocks (if not kilometres) with their groceries so are usually looking to only buy what they can carry in both hands. Successful manufacturers address these realities by providing consumers with products in smaller, easy-to-carry packages that are sufficient for making only one or two meals.

With most parents only allowed to have one child, shopping is also greatly influenced by the demands of their children. Euromonitor reports that about “30% of household income is dedicated to spending on children between birth and the age of 14,” and that “parents will buy the best they can afford.” As quality is paramount to Chinese parents, they will usually favour domestic brands over any foreign brand that fails to market itself as being of superior quality.\textsuperscript{115}

\textbf{Eating Habits}

With increasingly hectic schedules, a lack of storage space within the household and the challenges of carrying food long distances between the market and home, most consumers choose to eat at least one or two of their three daily meals in a restaurant or on the street. Although many rural families still eat most of their meals within the home, most urbanites are opting for more convenient and labour-saving options. Chinese consumers usually eat a traditional Chinese meal for breakfast, such as congee, dim sum or noodles, while lunch and dinner meals consist of different combinations of fish and meat, vegetables, soup, rice and steamed bread. With a massive array of street stalls selling everything from corn to dumplings to pastries, most people consume several snacks throughout the day and then join friends after work for a larger meal in a social setting.

\textbf{Major Trends Within the Market}

\textit{Booming Demand for Healthy Foods}

China’s rapidly ageing population, and the government’s increased emphasis on preventative healthcare, is driving demand for healthy foods. Euromonitor reports that increased consumption of healthier food and drink is noticeable in China, with fortified drinks performing well against competitors and organic and reduced-fat food products seeing greater demand in supermarkets.\textsuperscript{116} The increased emphasis on preventative health care has also led families to focus on maintaining a balanced diet for their young children.\textsuperscript{117} This is driving demand for naturally healthy products, such as blueberries, that can both facilitate cognitive function and disease prevention in seniors while providing the nutrition necessary for proper development in children. The CEO of China Organic Agriculture believes that “the opportunities in the blueberry industry are enormous as blueberry-based products will become increasingly in demand in China with a growing interest in healthy food alternatives.”\textsuperscript{118}

\textit{One-Child Policy is Resulting in Gender Imbalance}

Since the government of China implemented the one-child policy back in the 1970s, it is estimated that up to 400 million births have been prevented.\textsuperscript{119} While this has enabled the country to control its rapidly growing population, it has also led to a massive gender imbalance as a result of the general preference towards having a male child. The China Family Planning Association reports that 119 boys are born for every 100 girls in China and estimates that “by 2020, males between the ages of 20-45 will outnumber their female counterparts by 30
26 million. As this equates to roughly 88% of the total population of Canada, it’s easy to see that there will be many opportunities to develop and sell products to this large market of young men. As well, with so many more men than women it can be expected that the population of single males will increase; this should lead to increased purchases of healthy products that enable male consumers to feel and look better.

Although the Chinese government has not yet made any indication that it is lifting this policy, there is speculation that the stringent rules will be relaxed. Euromonitor predicts an estimated increase of over 4 million babies and infants in China between 2007 and 2015, which they expect will increase demand for healthy baby foods that incorporate natural fruits and vegetables, such as blueberries. They note that “brand loyalty is exceptionally pervasive among children when it comes to food,” and expect “heavily branded and cleverly marketed products aimed at children” to do well in this market.121

Street Vendors Still Seen as Freshest Option
If provided with the choice between fresh fruit or fruit juice from a street vendor and the same products sold from a supermarket, most consumers would choose the former. The fresh food industry lacks a solid framework in China and is dominated by small businesses.122 As a result, almost all fresh food traditionally consumed by the Chinese came either directly from the farmer or from a small distributor that works with the farmer. The abundance of small streetside vendors and local markets selling fresh fruit and fruit juices year round is limiting demand for pre-packaged fruit and vegetable drinks.

Food Industry Overview
The following sector profiles provide broad-level overviews of the areas in this market where opportunities for blueberries may exist. These overviews are intended to help the B.C. blueberry industry identify the expected level of growth and popular products present in each sector. Where possible, information has also been provided on consumer preferences and trends that are driving product development, and the key competitors in these markets.

Baked Goods
The baked goods sector grew by 5% in both retail value and volume terms in 2009. Unpackaged/artisanal bread continued to be the most dynamic subsector, with value sales growth of 7%. Both domestic and international brands are present in the market, but most companies are only competitive in specific regions. As convenience stores continued their rapid expansion into business districts, demand for single portion cakes continued to rise in 2009. This was driven by the busy white-collar workers who frequently purchase single portion cakes for snacks or breakfast.123

Pastries are also very popular with busy students and working-class consumers. Although pastries in China are quite fragmented in terms of product type, almost every convenience store and pastry shop sells buns filled with meat, jam or red bean. These filled buns have remained the most popular type of pastry in China for some time, but are now seeing competition from Western-style pastries such as muffins, croissants and puff pastries. Euromonitor analysts expect the demand for baked goods to continue to rise over the next five years due to the continuing process of urbanisation and impact of Western culture on young consumers. They also note that there is a strong likelihood that baked goods will steal share from traditional breakfast foods such as dim sum.124 Opportunities may exist for the B.C. blueberry industry to develop blueberry-filled pastries for this market or supply Chinese pastry manufacturers with processed blueberries.
**Biscuits**
The biscuits sector achieved a 7% growth in retail volume sales in 2009, with filled biscuits seeing the fastest growth at 13%. The leading company in the Chinese biscuits market is Kraft Foods China Inc., which accounted for 17% of total market value at the end of 2008, after merging with Danone. Kraft’s extensive distribution network and brand awareness has allowed the company to pull ahead of the second largest biscuits company, Donguan Hsu-Fu-Chin Food Co Ltd, by a market share gap of 11%. Chinese consumers are increasingly moving away from traditional types of biscuits, such as plain sweet biscuits and cookies, towards products that provide better taste or perceived health benefits. Filled biscuits benefit from the diversity of flavours and product innovations, and are very attractive to young students, white-collar workers and children as daily snack food. Shanghai Glico Food Co, one of the leading producers of filled biscuits in China, has captured a large share of the market through extensive TV advertising and uniquely-designed products that are attracting young female consumers looking for an alternative snack food.

Looking forward, the increase in personal disposable incomes and the process of urbanisation in China is expected to support a compound annual growth rate of 6% in volume terms over the next five years. As more consumers start to see biscuits not just as snacks but also as smaller meal replacements, Euromonitor expects that more consumers will purchase mid-priced and premium products instead of low-end cheap biscuits. In particular, they expect demand for filled biscuits, sandwich biscuits and savoury biscuits to continue to be strong in the future. Like in Japan, opportunities may exist for the B.C. blueberry industry to supply processed berries to filled-biscuit manufacturers in China. By capitalizing on the rising demand for healthier snack foods, these manufacturers may be interested in increasing the health profile of their products by integrating blueberries as a functional ingredient.

**Breakfast Cereals**
As a result of an ongoing campaign by Nestle and Kellogg to educate Chinese consumers about breakfast cereals, retail volume sales in the sector grew by 10% in 2009, to reach 29,300 tonnes. Nestle, the leading company in breakfast cereals, was responsible for 28% of retail value sales in 2008. Although many consumers in China’s small and medium-sized cities still prefer eating local cuisine for breakfast, a market for breakfast cereals has begun to develop in the larger cities of Beijing, Shanghai and Guangzhou. Demand from these first-tier cities is expected to continue to drive growth in this sector, with children’s breakfast cereals expected to be most promising as parents seek to improve the quality of their children’s breakfast meal in the face of increasing health concerns. Euromonitor analysts forecast a compound annual growth of over 8% in volume terms and 9% in constant value terms in the breakfast cereal sector over the next four years.

**Canned/Preserved and Chilled-Processed Foods**
Chinese consumers regard canned/preserved foods as unhealthy because of the traditional assumption that these products contain preservatives. With the abundance of fresh products available from the many local markets in China, consumers will usually choose fresh fruit over canned/preserved alternatives. In the past, canned/preserved fruit products were used as gifts when visiting patients in hospitals, but with rising disposable incomes these are being replaced by fresh fruit baskets. As a result, canned/preserved fruit is expected to be the only subsector to suffer negative volume growth over the next few years. To address this, the leading manufactures in the canned/preserved food sector are exploring the high-end segment of the market by adding in more nutritional ingredients such as calcium and protein in an attempt to build a premium image for their products.
For the same reasons that consumers stray away from canned/preserved foods, sales of fresh cut fruits is negligible in China. While whole fresh fruit is easily procured from street-based fruit stands, and remains very popular in China, fresh cut fruits are only available in supermarkets and hypermarkets, and are perceived to be less healthy. Consumers assume that preservatives are added to fresh cut fruits to keep them fresh, which is limiting demand for chilled processed fruit in China.\textsuperscript{130}

**Fruit/Vegetable Juice**

As noted earlier, the off-trade channel accounts for the majority of fruit/vegetable juice sales, as Chinese consumers prefer carbonates or freshly-squeezed Asian speciality drinks instead of packaged fruit/vegetable juice blends. For those purchases made through on-trade channels, 100\% juice recorded the fastest total volume and value growth in 2008. This is a result of growing demand from middle-to-high-income consumers in China’s first-tier cities who are looking to increase their consumption of naturally healthy products. The most popular flavour for fruit/vegetable juice in 2008 continued to be orange, but with increasing prices for orange concentrates many manufacturers started to focus on peach, kiwi or mixed fruit flavours.\textsuperscript{131}

The fruit/vegetable juice market is dominated by domestic players, with Coca-Cola being the only international player ranked among the top five companies. However, through its Minute Maid and Qoo brands, Coca-Cola China Ltd led fruit/vegetable juice in total volume terms in 2008. In the next five years, 100\% juice is predicted to continue registering the fastest total volume and value growth. This is a result of consumer’s preferences for 100\% juice over nectars and other types of fruit drinks, which they perceive to be less healthy choices with more additives. Packaged smoothies have not yet taken off in China, and it is expected that a lack of consumer knowledge about the differences between smoothies and other traditional diary-based drinks is likely to hinder further growth over the next few years.\textsuperscript{132}

**Fruits**

China produced around 172 million tonnes of fruit in 2008, with almost half being consumed fresh. Chinese consumers have long known about the benefits of having fresh fruits as an integral part of the diet, and most consume them daily. Bagged apples, pears, peaches and oranges dominate the fruit market, as they are protected from weather damage, pests and diseases, and exposure to chemical residues. However, consumer interest is expanding for raspberries, strawberries and blueberries. The cranberry/blueberry subsector saw the strongest growth in this sector in 2008 with an 8.2\% rise in volume sales, and is expected to show compound annual growth rates of 4.6\% between 2008 and 2013. It is important to note, however, that this subsector is growing from a very small base.\textsuperscript{133}

Although the majority of consumers are still choosing to buy fresh fruits from local farmers, rising consumer incomes are opening the door for premium-quality imported fruits. An increasing number of Chinese consumers are switching over to imported fruits because they prefer the wider variety and better taste, nutrition and appearance. Both imported and fresh fruits are generally sold to wholesale markets who then sell them on to supermarkets or vendors in wet markets. These wholesale markets play a very important role in fruit distribution, particularly in South China, and this is not expected to change significantly in the short and medium term.\textsuperscript{134}
**Gum**

The focus on living a healthy lifestyle is leading more Chinese consumers to consume functional gum products, which are expected to show compound annual growth rates in value terms of 7% between 2009 and 2014. In 2009, blueberry and green tea flavours showed up on the market for the first time. Euromonitor reports that fruit flavours are very popular in sugar-free variants and predict that berries will emerge as a niche trend, as blueberry is already a popular variant in sugarless gums. As a result, opportunities may exist for the B.C. blueberry industry to supply natural blueberry extracts to functional gum manufacturers in China.

**Snack Bars**

Snack bars have not yet taken hold in China, and there are almost no large-scale companies attempting to enter or cultivate a market in the country. As most consumers have never even heard of this kind of product the market has remained relatively unexploited. Euromonitor analysts report that the flavour of snack bars is unfamiliar in China – similarly to breakfast cereals – and does not appeal to the majority of local consumers. They expect that any potential demand for snack bars will come initially from first-tier cities, such as Beijing and Shanghai, where imported snack bar products are being test-marketed to affluent urban Chinese consumers. The opportunities for the B.C. blueberry industry to supply blueberries as functional ingredients in this sector are likely limited until a market for these products is cultivated in China’s first-tier cities.

**Spreads**

The spreads sector achieved retail volume sales growth of 4% in 2009, to reach 149,400 tonnes. Due to low entry barriers in this sector, there are many regional-level companies and international companies battling for market share in a rather fragmented market. Honey accounted for over 62% of retail volume sales in 2009, making it the biggest subsector. Within the jams and preserves subsector, strawberry is recognized as one of the most popular flavours, followed by apple and orange. Blueberry was ranked as the fourth most popular flavour in 2009, up from sixth place in 2007 and 2008. Sugar-free jam products are seeing stronger demand in the market due to the lack of premium price for these products over standard jam; however, the artificial taste of sugar-free jam is making it a bit difficult for consumers to accept this kind of product. Euromonitor expects sales in both volume and value terms to see a compound annual growth rate of around 5% between 2009 and 2014. As the popularity of blueberry flavoured jam is continuing to increase in China, opportunities may exist for the B.C. blueberry industry to supply processed berries to Chinese or international manufacturers in this market.

**Sweet and Savoury Snacks**

The sweet and savoury snack sector in China, which saw a 4% volume growth in 2009, comprises products such as fruit snacks, seeds, beef jerky, codfish slices and pork slices. The fruit snacks subsector is growing at a slower rate than the sector as a whole, but still managed to post a compound annual growth rate of 5% in volume terms since 2004. This is primarily due to consumers preferring savoury snacks to sweet ones and, more often than not, choosing salty flavours when it comes to snacking. Consumers in Shanghai hold the biggest promise for sweet tasting products, as this region has been exposed to foreign influence for much longer than other areas of the country. PepsiCo Inc. has tried to capitalize on this by introducing a new series of Lay’s Potato Chips in the market with lychee, blueberry and mango fruit flavours. Euromonitor reports that the market for sweet and savoury snacks is mature in China, so more companies are expected to focus on mid- and high-end products in the future. Opportunities may exist for the B.C. blueberry industry to develop high-end functional blueberry snacks that can capitalize on the trend towards healthier products in this market.
Yoghurt
Since 2004, total yoghurt sales climbed at a compound annual growth rate of 16.7%. Yoghurt products are a relatively new and emerging category among Chinese consumers, with major consumption taking place in cities or affluent rural areas. Though the top five players in the market are currently all domestic, international companies have identified the opportunities in China and are moving in quickly. Drinking yoghurt remained the most popular form of yoghurt in 2009, achieving more than double the value sales of spoonable yoghurt. This is mainly a result of convenience and a wider product range offered in the drinking yoghurt category. In 2008, Shanghai Yili AB Foods Co. Ltd. introduced a drinking yoghurt aimed at young urban women with white collar jobs. The product claims to aid weight loss, and improve beauty, while containing 50% of the fat of regular yoghurt and added collagen and active probiotics. One of their more popular flavours is Skin Regenerating Blueberry.\textsuperscript{138}

Strawberry was the most common type of fruited yoghurt in 2009, followed by peach, blueberry and apple. Blueberry has been the 3\textsuperscript{rd} leading flavour in fruited spoonable yoghurt since 2003. There is greater choice in the flavoured yoghurt category, with strawberry, aloe and blueberry being the most popular, followed by peach, pineapple, grape jelly, kiwi and orange. Blueberry was the 5\textsuperscript{th} most popular flavour in 2006, the 4\textsuperscript{th} most popular flavour in 2007 and 2008, and the 3\textsuperscript{rd} most popular flavour in 2009. While strawberry is considered a standard flavour, blueberry, raspberry and cherry are growing as novelty flavours, with more regional berries such as mulberry and jujube also gaining in popularity.\textsuperscript{139} Opportunities may exist for the B.C. blueberry industry to supply blueberries to manufacturers of fruited spoonable yoghurt in this market.
TAKING ADVANTAGE OF EMERGING OPPORTUNITIES IN INDIA

MARKET OVERVIEW

Economic Snapshot
India’s gross domestic product has increased by 83.5% since 2004, reaching $1,194.2 billion in 2009. With a population of 1.169 billion people, this breaks down to a GDP per capita of $1,022. The gross domestic product in terms of purchasing power parity was $3,575.0 billion in 2009 – or $3,059 per capita.140

According to the CIA World Factbook, India is ranked 79th out of 133 countries in regards to the degree of inequality in the country’s distribution of income, as measured by the Gini coefficient. In comparison, China is ranked 56th, Japan is ranked 74th and Canada is ranked 100th.141 Although India is ranked higher than both China and Japan, the rapid economic development in India is leading to an increase in income inequality between urban and rural areas. Recent surveys indicate that the top 10% of the income groups in the country share around 33% of the total income, while about a quarter of the population is still earning less than the minimum level of $0.40 per day.142

Blueberry Market Snapshot
Very little market information exists for the blueberry market in India. The U.S. Highbush Blueberry Council reports that they held week-long promotions in Mumbai and Delhi in October 2008, where 85 percent of consumers surveyed indicated that they loved the taste of blueberries. This occurred just after the government of India legalized the import of fresh blueberries into the country.143

According to an article published in December 2008 by the Economic Times in India, The Mahabaleshwar-based Mapros Foods was set to import their first container load of blueberries from California in January 2009 and begin launching blueberry preserves, syrups and confectionary in April 2009. The article indicated that farmers were keen to experiment with the fruit and the company had hopes to be able to source blueberries locally by 2011. Although there is no indication from Euromonitor or Global Trade Atlas that fresh or frozen blueberries are already present in the market, this article reports that the annual consumption of imported blueberries is around 25 tonnes. As the importation of fresh blueberries only recently became legalized in India, this number lacks much credibility.144 The Mapros Foods website (http://www.maprofoods.com/) does not yet show any blueberry-related products and emails to the company inquiring about the availability of these products were not returned.

Datamonitor – a leading provider of global business information – indicates that there are nearly 20 different imported blueberry products found in India (including preserves, juice, and blueberry jam filled muffins and cookies).145 As the market for specialty imports is restricted to the more affluent cities of the country (and to high-end specialty stores and supermarkets within those areas), it is likely that these products are not well known or widely consumed throughout India.
CONSUMER PROFILE

TABLE 8 – INDIAN CONSUMER PROFILE

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Avg. Annual Gross Income</td>
<td>US$ 876.80</td>
<td>US$ 1,449.00</td>
<td>73.6%</td>
<td>65.3%</td>
<td>11.7%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Avg. Disposable Income</td>
<td>US$ 839.10</td>
<td>US$ 1,389.20</td>
<td>69.7%</td>
<td>65.6%</td>
<td>11.2%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Avg. Consumer Expenditure on Food</td>
<td>US$ 207.80</td>
<td>US$ 375.30</td>
<td>67.0%</td>
<td>80.6%</td>
<td>10.8%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Avg. Consumer Expenditure on Fruit</td>
<td>US$ 17.90</td>
<td>US$ 36.00</td>
<td>98.9%</td>
<td>101.7%</td>
<td>14.7%</td>
<td>15.1%</td>
</tr>
<tr>
<td>% of Households with Freezer</td>
<td>11.6%</td>
<td>16.6%</td>
<td>88.4%</td>
<td>43.1%</td>
<td>13.3%</td>
<td>7.4%</td>
</tr>
<tr>
<td>% of Households with a Fridge</td>
<td>17.0%</td>
<td>20.8%</td>
<td>22.2%</td>
<td>16.5%</td>
<td>4.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Average Age of Population</td>
<td>27.5</td>
<td>28.6</td>
<td>3.9%</td>
<td>4.1%</td>
<td>0.8%</td>
<td>0.8%</td>
</tr>
<tr>
<td>% of Population Aged 65+</td>
<td>4.8%</td>
<td>5.3%</td>
<td>15.3%</td>
<td>15.8%</td>
<td>2.9%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

Source: Euromonitor (Note: figures for 2009-2014 based on March 2010 Euromonitor forecasts; all data based on fixed 2009 exchange rates)

Population Demographics

India is expected to become the world’s most populous country within the next 25 years, driven mostly by its high birth rate, rising life expectancy and the desire for rural families to continue having children until they have a boy. The average age of India’s population is 27.5 years, which is currently one of the youngest populations in the world. Looking forward, the population is destined for a shift in age-structure that will lead to a massive increase in the number of people over 30 years of age, as shown in Figure 3. As well, according to the United Nation’s 2007 State of the World Population Report, “the urbanization of India is taking place at a faster rate than in the rest of the world. By 2030, 40.8% of India’s population will be living in urban areas compared to about 28.4% now.”

Figure 3: Indian Population Pyramid

Source: U.S. Census Bureau (population in millions of people)
**Household Profiles**

Although single-person households only constitute 4.6% of total households in India, they have witnessed the fastest growth, at 121.8%, between 1995 and 2007. Households with five or more people still constitute the largest proportion of total households, at 50%, while two- to four-person households are second, at 38.8%. There is a slow shift in India towards smaller households, driven by a decrease in marriage rates, an increase in the age of marriage and childbirth, an increase in divorce rates and efforts by the government to reduce the fertility rate of the country. Disposable incomes have been rising steadily since 1995, when 41.7% of households had disposable income of US$1,000-1,750. By 2007, 31.3% of households had disposable incomes of US$2,500-5,000.

**Shopping Habits**

With close to five million local grocers in India providing informal credit, home delivery and sales in small quantities, organized retail is only just beginning to make its mark. In rural areas, consumers still prefer to purchase products from these smaller local establishments because the storeowners often establish relationships with their customers and help to ensure they can get their monthly supply of food even when they do not have a steady income or a way of transporting these goods to their homes. In urban areas, middle- and high-income consumers are increasingly shopping at supermarket chains because they offer a greater range of products that consumers can touch and see before they buy. These wealthier consumers prefer to purchase vegetables and fruits from supermarkets because they see these products as being cleaner and fresher than those found in local shops. Overall, consumers in India spent 32.4% of their income on food and non-alcoholic beverages in 2007, with 5.5% of total expenditures spent on fruit and 25.0% of total expenditures spent on vegetables. It is also important to note that, unlike in China and Japan, Indian children have no decision-making power when shopping, so products for children should be targeted at the adult buyers of the household.

**Eating Habits**

Indians traditionally prefer to cook their food fresh for each meal, but with the increase in the number of working women in urban India, there has been a shift towards eating out, take-away, home delivery of food and readymade meals. A study conducted by KFC in India reported that nearly 97% of urban Indians eat out in groups of three or more, and vegetarian members are usually responsible for making the decision about where to eat. Despite the growth in eating out, however, home-cooked food is still favoured by many. Due to the inability to afford eating out in rural India, many working women still cook food in the morning and pack it for lunch and dinner for their families. Within rural areas, cereals and cereal substitutes account for roughly 38% of monthly spending and 71% of caloric intake in each meal.

Although tastes and food preferences vary greatly across each region of India, urban consumers are the most open to new flavours and products due to an increased number of restaurants serving cuisines from all parts of the country. Due to increases in discretionary income, consumers are now purchasing more expensive vegetables such as peas, carrots, peppers, mushrooms and Western herbs, which were all a rarity five years ago. As cold storage has increased at the retail level, the market for chilled and frozen foods has also increased over the past five years. However, as only 11.6% of households own a freezer and 17% own a fridge, the market for frozen fruits and vegetables is limited to the middle- and high-income earners in India’s larger cities. Traditionally, dairy products such as flavoured milk, ice cream and milk-based sweets have all been popular with Indians, especially children.
MAJOR TRENDS WITHIN THE MARKET

Increased Awareness of Health Issues

Through mass media campaigns aimed at educating Indians about the need to maintain healthy lifestyles, consumers are increasingly becoming aware of the importance of exercise and the benefits of eating vegetables and fruits. In urban areas, organic, low-fat and sugar-free foods are all showing enormous growth, as are products that reduce stress, slow the ageing process, improve heart function and fight diabetes. Although these healthier products are still niche markets, a more diversified diet and interest in healthier eating is increasing consumption for many fruits. With growing demand for products that are naturally healthy, blueberries have excellent potential within these niche markets. The primary focus, however, will need to be on educating consumers about the health benefits of blueberries and creating a market for them within India’s most affluent cities – New Delhi, Bengaluru, Greater Mumbai, Chennai, Hyderabad and Kolkata.

Rapid Rise in Employment Leading to Increased Size of Middle Class

Although there is still significant underemployment in India, especially among women, India generated 11.3 million net new jobs per year on average between 2000 and 2005 – versus China’s 7 million, Brazil’s 2.7 million and Russia’s 0.7 million. With most of this job creation occurring in India’s unorganized sector, many poor households can now afford to send their children to school, spend on better healthcare and live in better houses. This rising middle class is the main driver behind most consumer trends. As the income of India’s rural population continues to rise, demand for niche products at low price points offers phenomenal and currently untapped potential in the market.

More than Half of the Population is Under 25 and Single

As mentioned earlier, India has one of the youngest populations in the world. As a result of the massive population of single young men and women, there has been increased spending on processed foods, eating out, leisure and fitness. This young demographic is very brand-conscious as it views shopping as a form of entertainment. With such a large market of unmarried, young consumers – usually with higher disposable incomes than their married counterparts – successful food manufacturers are focusing on delivering products that are heavily branded and convenient to consume. To grab the attention of this technology-savvy group, food manufacturers will need to incorporate innovative marketing campaigns that provide both product information and entertainment.

India is Set for Food Packaging Revolution

As food consumption patterns change and more consumers turn in increasing numbers to packaged and ready-to-eat foods, Datamonitor analysts predict that there will be a revolution in food packaging. They have identified four major trends driving packaging innovation in India: convenience of usage, freshness and improved shelf life, sustainability, and packaging as a tool to position and promote the brand. Advanced packaging solutions have not yet become widely established in India, and most innovation in this area has been driven by Western manufacturers looking to develop opportunities to differentiate their merchandise from local competitors. As mentioned earlier, consumers who can afford to purchase fruits from supermarkets already do so because they believe they are cleaner, fresher and of higher-quality. Therefore, it would be wise for any exporter from Canada to ensure that they leverage advanced packaging technologies to differentiate their products from other fruit-related products in the market.
**Food Industry Overview**

The following sector profiles provide broad-level overviews of the areas in this market where opportunities for blueberries may exist. These overviews are intended to help the B.C. blueberry industry identify the expected level of growth and popular products present in each sector. Where possible, information has also been provided on consumer preferences and trends that are driving product development, and the key competitors in these markets.

**Baked Goods**

As consumers traded up from independent neighbourhood bakery stores to chained establishments such as Monginis and BreadTalk, the baked goods sector grew by 7% in value terms in 2009. Unpackaged/artisanal products accounted for 57% of the total value sales of baked goods in 2009, as manufacturers encouraged consumers to replace cooked breakfasts with bread through both health and wellness and flavour innovations. Although health and wellness products are expected to fare well with affluent urban consumers, Euromonitor analysts report that most of these consumers are not very aware of niche products such as omega-3 fortified foods. Any launch of a blueberry bread product would need to be accompanied by an educational campaign to ensure these consumers understood the health benefits associated with this foreign ingredient.

Consumers also traded up to more premium cakes in 2009, with single-portion cakes continuing to dominate both urban and rural sales. These single-portion cakes are aided by affordability, availability and convenience, and are often provided to schoolchildren for snacks to be consumed on-the-go. Puff pastries, which come with various savoury fillings, are the most popular pastry sold in India as these are also common snacks for schoolchildren. Euromonitor analysts predict that these types of products aimed at young children will continue to register high single-digit growth over the next five years.

**Biscuits**

The biscuit sector grew by 15% in value terms in 2009, with cookies posting the strongest growth at 26%. In volume terms, filled biscuits saw the fastest growth, growing by 19.4% from approximately 45,000 tonnes to 54,000 tonnes. The sector is dominated entirely by domestic players, with national players driving product innovation and market growth and regional players maintaining significant presence in their local markets. Plain biscuits continue to be the most popular, with Glucose and Marie branded variants being staple grocery items consumed with tea/coffee throughout the day in India. Manufacturers experimented with premium and health and wellness brand launches in 2008, but it was evident in 2009 that consumers favoured the mid-priced and economy offerings for regular consumption and were not willing to upgrade. Health and wellness biscuits, such as those with flaxseed, were not well accepted by consumers due to low awareness about the benefits of consuming the healthy ingredients in these products. Opportunities for blueberries are likely far off in this sector until consumers understand the health benefits of blueberries and feel that premium price points are worth their investment.

**Breakfast Cereals**

Most Indians prefer hot breakfasts consisting of freshly-cooked traditional dishes, which is limiting the expansion of breakfast cereals in India. Most middle-class children consume milk for extra nutrients in the mornings, but this is usually consumed hot. As hot milk tends to make flaked cereals soggy, the conversion of consumers to breakfasts such as cornflakes has not taken hold. However, because muesli fares better with hot
milk, this category saw the strongest growth in breakfast cereals in 2009. Manufacturers are aggressively promoting the health benefits of muesli products through high-end supermarkets. The launch of Complan Nutri Bowl Muesli is expected to benefit this subsector because it is a very high profile brand in India which is favoured by mothers for providing the requisite nutrients for growing children. Muesli is expected to see the fastest annual growth over the next five years. With 47% of the value share of breakfast cereals in 2008, Kellogg India is dominating the market with its pan-India presence in muesli, flakes and children’s breakfast cereals. Once the health benefits of blueberries are understood in India, opportunities may exist for the B.C. blueberry industry to supply processed berries to manufacturers of muesli in India.

**Fresh Food/Fruits**

As a result of government-sponsored campaigns promoting healthy food in rural India, rising per capita income, and increasing health awareness among urban Indians, India’s fresh food market grew dynamically in 2008. India is one of the key food producing countries in the world, ranked second in fruit production and third in vegetable production. Fresh food is consumed daily in at least two meals, with potatoes being the single largest fresh food type consumed in the country. Most consumers purchase fresh food from wet markets, open air stalls or pushcart vendors selling fruits and vegetables at reasonable prices. Despite the very low awareness of organic food in India, the government has begun an initiative to convert 20,000 farmers and a total area of 75,000 hectares to organic farming over the next three years.

India accounts for 10% of all fruit production and nearly 40% of tropical fruit production globally. Consumption of fruits grew by 6% in 2008, with bananas accounting for 45% of the 40 million tonnes of fruit eaten in the country that year. As a result of poor packaging and quality control in India, they have not been able to tap the export market for bananas. This has resulted in low prices and a plentiful supply for the local market. However, despite the popularity of bananas, the Government of India has implemented nutrition education programs that have increased demand for higher-quality fruit. Although still a very small market, strawberries benefited from this and recorded the fastest volume growth for fruits at 50% in 2008. Euromonitor analysts report that consumers are also showing growing interest in raspberries and blueberries, although no sales figures were present for the blueberry market in India between 2003 and 2008.

Opportunities may exist for the B.C. blueberry industry to sell fresh berries in the more affluent areas of India, such as New Delhi or Greater Mumbai. As a result of the poor quality control evident in the banana market, the government’s efforts to increase demand for higher-quality fruit and the premium health benefits of blueberries, it is likely that fresh imported blueberries will have a competitive advantage over domestic produce if suppliers can properly market the benefits associated with Canada’s reputation for quality and food-safety.

The most sought after berry in India is the gooseberry, referred to as aonla or amla in the local language. This berry is frequently used in Ayurveda, an ancient Indian text on health care that is followed by a majority of the population. Honey or sugar syrup containing gooseberries are very popular with Indian households. Traditionally, these types of products were made in the home, but with more working women these products are increasingly being bought from stores. The B.C. blueberry industry could leverage the popularity of the Indian gooseberry to drive initial demand for blueberries by educating consumers on the associated health benefits of these two superfruits.
**Gum**

Blueberry was ranked the 6th most popular gum flavour in 2009, up from 8th place in 2004, 2005 and 2006, and 7th place in 2007. The top five most popular flavours in 2009 were strawberry, spearmint, peppermint, juicy fruit and apple. The market for gum is expanding as product and flavour innovations are combining with extensive advertising and promotional activity for functional gum to attract attention to the sector. Euromonitor reports that flavour innovation is a key strategy for gum manufacturers in India and intensely flavoured liquid fillings are very popular in both bubble gum and chewing gum. As a result of this growing popularity for liquid fillings, it is expected that exotic fruit flavours are expected to perform well over the next five years. One popular innovation to hit the market recently is Bubbaloo, a soft bubblegum with a fruit-flavoured liquid filling, such as strawberry and mixed fruit. Opportunities may exist for the B.C. blueberry industry to supply natural blueberry extracts or liquid fillings to functional gum manufacturers targeting India.

**Snack Bars**

Like in China, snack bars are still an underdeveloped product category in India due to lack of consumer awareness. However, India shows more promising growth in this sector than China as rising health consciousness among consumers and increasing penetration of popular brands such as Nature Valley, Horlicks and Rite Bite are driving growth in high-end supermarkets. Fruit bars made from mango pulp – known as Aam Papad – have been consumed for a very long time in India. It is expected that manufacturers can begin creating a market for snack bars by associating these newer products with mango fruit bars traditionally consumed in the country. Euromonitor analysts predict strong expansion in this sector over the next five years, as “GlaxoSmithKline Consumer Healthcare is expected to leverage the brand equity and health cachet of India’s largest malt-based drinks brand to carve out a niche for snack bars in India.” Opportunities may exist for the B.C. blueberry industry to supply blueberries as a functional ingredient for snack bar manufacturers in India.

**Spreads**

Ayurveda, the ancient Indian text on health care, recognises the beneficial properties of honey and has driven growth in this subsector for many years. Honey continued to post the fastest growth within the spreads sector in 2009. Jam is also quite popular in India, with mixed fruits flavour dominating sales. Pineapple, orange, mango and strawberry made up the remaining top five leading flavours in the jam market during 2009. Dabur India, the leading player in honey, and Hindustan Unilever, the leading player in jams and preserves, control the industry with a combined value share of 71% in 2008. These companies have launched squeezable tube formats that allow children to play with the product and participate in the preparation of their meals. These products have become very popular in a short period of time. Euromonitor analysts expect that functional honey and jams fortified with herbs and other ingredients will become niche products moving forward, while “growth in jams and preserves is expected to be tempered by consumers’ health concerns about consuming too much sugar.” Blueberry has not ranked in the top ten most popular flavours for jams or preserves in India, indicating that there are likely very few, if any, blueberry spreads on the market. Opportunities may exist for the B.C. blueberry industry to supply blueberries to jam manufacturers in India, but consumers would need to be educated on the health properties of this new fruit in order to create demand for this type of product.
Sweet and Savoury Snacks

With the introduction of new innovative flavours and brand extensions catering towards regional tastes and preferences, the sweet and savoury snacks sector grew by 13% in value terms during 2009. Euromonitor reports that “consumers in the southern states tend to favour regional fruits as ingredients in snacks, such as banana chips in yellow (plain salted), tangy and black pepper variants, or coconut garnished snacks, [while] spicy, chicory, tamarind, chilli variants and flavours from Malabar dominate in the South.” Branded, packed savoury snacks are still a very small part of this market, as Indians prefer the freshness and variety offered by local delicatessens. Looking forward, it is expected that sweet and savoury snacks will see a compound annual growth rate of 12% in value terms between 2009 and 2014. Opportunities may exist for the B.C. blueberry industry to supply dried blueberries to snack manufacturers in the southern states of India.

Yoghurt

Indians have traditionally consumed yoghurt products, such as dahi and lassi, which were produced in the home at a very negligible cost. Given the high unit prices of branded products, consumers preferred their homemade concoctions over those found in the supermarket. However, with rising incomes more consumers are willing and able to pay a premium for packaged products, and they see these as more consistent in quality than those made at home. This resulted in an 18% value sales growth in 2009, with sour mild drinks posting the fastest growth at 22%. The yoghurt sector is dominated by domestic players, with Nestle and Yakult being the only multinational players in the market.

Consumers in India consume yoghurt in two forms: set and stirred/loose. The set yoghurt, which is usually sold in plastic cups or bowls and has a higher viscosity, is consumed in Northern and Western India, where consumers often mix in sugar and consume it as a dessert. The stirred/loose yoghurt, which is usually sold in liquid format in plastic pouches, is cheaper than set yoghurt and is largely consumed in Southern India on a daily basis with rice. Due to their traditional preference for plain yoghurt, the fruit and flavoured yoghurt tastes do not appeal to Indian consumers. As a result, plain spoonable and plain stirred yoghurt are expected to remain the most popular products in the country. Euromonitor analysts predict, however, that “intensifying health consciousness may help niche products like probiotics yoghurt to develop at a greater rate in leading metropolitan areas.” Unlike China and Japan, the opportunities for supplying blueberries to yoghurt manufacturers are likely limited or non-existent in this market in the short- and medium-term.
CONCLUSION

Although B.C. blueberry growers are facing tough competition in their current markets, China and India both provide excellent opportunities for growth in the future. Regaining market share in Japan will require much greater effort, but value-added opportunities in this market are still emerging.

In Japan, market development efforts should focus on serving the ageing population and utilizing Japanese brands to increase demand for B.C. blueberries. Opportunities may exist for B.C exporters to supply blueberries to Japanese manufacturers of biscuits, snack bars, spreads and yoghurt. Incorporating blueberries into these types of products will enable Japanese manufacturers to increase the functional properties of their products and attract more health-conscious consumers. By encouraging manufacturers to use B.C. blueberries as a functional ingredient in Japanese-branded products, this will ensure that these products are not limited to the premium imported section of speciality shops and high-end supermarkets, and will increase demand for B.C. blueberries within this market.

Although there is a common perception that Japanese consumers are willing to pay a premium for Canadian-branded products, this is no longer the case. In the past, Canada’s food-safety and quality-assurance programs provided Canadian products with a competitive advantage in the Japanese market because the competitors in this market were not yet offering products of such high-quality. However, as competition in this market has become increasingly fierce, consumers now demand premium quality at economy prices and Canada’s competitors have responded by investing heavily in their own food-safety and quality-assurance programs. As a result, Canada is losing some of its market share in Japan because exporters are still under the belief that they can demand premium prices for Canadian products. In order to regain market share in Japan, B.C. blueberry growers will need to adjust their marketing strategies to ensure that they can remain competitive in this market.

In China, market development efforts should first focus on establishing presence in the cities of Hong Kong and Shanghai, where consumers have long been exposed to western products and are more inclined to purchase imported products over those produced domestically. By leveraging Canada’s strong reputation for quality-assurance and food-safety, and the large test market of Chinese consumers in Metro Vancouver for value-added products, B.C. blueberry exporters have an excellent opportunity to establish presence in this market while it is still in its infancy. The challenge in China will be to ensure that B.C. blueberry exporters can meet the demand of importers once they enter into the market, as importers are sometimes discouraged with Canada’s inconsistency regarding the ability to meet order sizes.

In India, market development efforts should initially focus on educating consumers about the health benefits of fresh B.C. blueberries and creating demand in cities such as New Delhi or Greater Mumbai. By relating the healthy benefits of B.C. blueberries with those of the Indian gooseberry, marketers can leverage the traditional aspects of Indian health care to create a premium positioning for this new product.


Gini Coefficient Index = measures the degree of inequality in the distribution of family income in a country. The index is calculated from the Lorenz curve, in which cumulative family income is plotted against the number of families arranged from the poorest to the richest. (Source: CIA World Factbook)


“Ibid.”


“Ibid.”


Ibid.


Ibid.


Ibid.


Ibid.


Ibid.


Ibid.
Ibid.


Ibid.


Ibid.


“Ibid.


Ibid.


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Ibid.


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“Ibid.


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