

**Feeding the future:
Advancing dairy
processing in BC**





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Executive summary

Canada's dairy industry is an important contributor to our Gross Domestic Product with dairy farms and dairy processing situated across the country in every province. In 2020, Canada had just over 10,000 dairy farms with net farm cash receipts of \$7.13 billion; a herd of 1.4 million cows and heifers; and total production of 93.5 million hectoliters of milk. Canada's dairy processors have annual sales of \$16 billion, over 24,500 employees, and a total payroll of \$1.2 billion.

BC Dairy is a not-for-profit organization that represents British Columbia dairy farmers. BC Dairy works hard to grow the market for dairy products, and supports the long-term business health of dairy farmers. Feeding the future: Advancing dairy processing in BC is the first project in the multi-phase BC Dairy Processing Initiative. For dairy production on farms to grow, the province needs more dairy processing capacity. BC Dairy producers seek to better understand the barriers and opportunities dairy processors face when they consider expanding existing facilities or building new operations and seek to play an active role in fostering an attractive business environment.

To gather this information an agricultural consultant was hired to contact and interview a large sample size of dairy processors operating across British Columbia, the rest of Canada and elsewhere. Most of the 26 interviews were held with company Chief Executive Officers or Senior Vice Presidents over a one-hour period. Due to the COVID-19 pandemic all the interviews were completed remotely by video conference in English or French by the same consultant to encourage candid discussion and to ensure consistency and accuracy of the aggregated results. Given the relatively high participation rate (26 out of 45) and the very senior level direct engagement in the interviews it is fair to conclude that dairy processors across Canada were pleased to participate and share their responses with BC Dairy.

Most of the companies interviewed mentioned that this year has been unusually difficult due to COVID 19 and the disruptions that the global pandemic has brought to their sector. The pandemic has slowed plans for innovation. Supply chains for ingredients and packaging materials were turned upside down.

Barriers expressed by dairy processors to innovation and processing growth include: low profitability in dairy processing; excessive fees and penalties charged by grocery retailers; uncertainty in the marketplace due to recent international trade deals; an overly complex milk marketing regulatory system; low availability of BC commercial space; expensive BC real estate; lengthy BC municipal approval processes; high capital cost of new processing facility set up and equipment; lack of general and qualified personnel; distance from major Canadian customers and consumers; changing consumer expectations and preferences; and lack of scale in the marketplace due to low Canadian population and limited export opportunities.

Dairy processors surveyed do see a number of opportunities for innovation and processing growth, which include: guaranteed supply of high-quality BC raw milk supported by the western milk pool; growing affluent diverse population; differentiated BC raw milk supply; assignment of all dairy import quotas to Canadian and BC dairy processors; promotion of commercial opportunities to processors currently operating outside of BC; more knowledge transfer and assistance to smaller companies with product formulation, innovation, and process controls; co-packing with underutilized BC processing capacity or with a dedicated new dairy processing facility; partnerships between BC cheese makers and BC wineries; identification of underutilized cheese processing capacity through the BC Artisan Cheese Association; connection of BC dairy processors with Feed BC to get more dairy products into BC government supported institutions; access to new funding under the new British Columbia Economic Development Agency for dairy processing expansion and innovation; export sales of premium BC dairy products to Asia; upgrading of provincially inspected dairy processing facilities to federal standards so that their products can be sold inter-provincially; and connection with BC's First Nations who could provide needed land, people and opportunity for joint economic development.

The Feeding the future: Advancing dairy processing innovation in BC recommendations are:

1. It is recommended that a **full-time industry-led Business Development Officer be hired to focus on dairy processing expansion and innovation** in the province of British Columbia.
2. It is recommended that **BC Dairy and the BC Milk Marketing Board continue to fully support the dairy processor advocacy efforts** surrounding a legislated, mandatory, and enforceable Grocery Code of Conduct and the exclusive allocation of dairy product import quota to Canadian dairy processors.
3. It is recommended that the BC Milk Marketing Board work with other provincial milk marketing boards and Canada's dairy processors to **simplify Canada's milk classification and pricing system**.
4. It is recommended that an **industry-led Dairy Processing Specialist be hired** to help British Columbia's dairy processors with their product innovation and new product formulation.
5. It is recommended that a **dairy processing co-packing facility be established** to facilitate dairy processing capacity expansion and innovation in the province of British Columbia.
6. It is recommended that the **BC Government amend its Milk Industry Act and Milk Industry Standards Regulation** to remove all limits on the sale of dairy products to packages of specified size, weight or by dimensions or by volume.

Introduction

Background and Study Purpose

Canada's dairy industry is an important contributor to our Gross Domestic Product with dairy farms and dairy processing situated across the country in every province. In 2020, Canada had just over 10,000 dairy farms with net farm cash receipts of \$7.13 billion; a herd of 1.4 million cows and heifers; and total production of 93.5 million hectolitres of milk.

There are 514 dairy processing facilities in Canada with 270 of them federally inspected and another 244 provincially inspected. Canada's dairy processors have annual sales of \$16 billion, over 24,500 employees, and a total payroll of \$1.2 billion.

In British Columbia there are 28 federal dairy processing facilities and another 26 provincial dairy processing facilities. Those dairy processors generated sales of goods manufactured of almost \$1.5 billion. The province is home to 468 dairy farms with a total of 133,200 cows and heifers. Those farmers produced over 840 million litres of milk valued at \$683 million.

BC Dairy is a not-for-profit organization that represents British Columbia dairy farmers. BC Dairy works hard to grow the market for dairy products, and supports the long-term business health of dairy farmers. Feeding the future: Advancing dairy processing in BC is the first project in the multi-phase BC Dairy Processing Initiative. An agricultural consultant was hired to lead the project.

Following the BC Dairy Strategic Business Forum held in December of 2020, BC Dairy initiated a project to answer the critical questions raised by producers during the event. Primarily, the Feeding the future: Advancing dairy processing in BC project will engage with a wide range of industry stakeholders and experts to understand the opportunities and barriers to investment in dairy processing innovation and capacity growth in British Columbia.

BC dairy producers seek to better understand the barriers and opportunities dairy processors face when they consider expanding existing facilities or building new operations and seek to play an active role in fostering an attractive business environment. BC Milk Marketing Board reports to dairy producers on a regular basis that BC dairy processing capacity is fully subscribed. For dairy production on farms to grow, the province needs more dairy processing capacity. There may be an opportunity for BC facilities to process products for a national consumer base. Producers want to know what can be done to attract processors that are operating in other areas of Canada, or globally, to open a new operation in BC.

Alternatively, producers would like to understand what can be done to incent processors currently operating in BC and Western Canada to add new product lines to their current operations. Finally, it is important to producers, through the leadership of BC Dairy, to understand the role producers can play to help processors succeed when they make investments in the BC market.

Scope of Work and Survey Methodology

The main deliverable for the project is this final report with aggregated qualitative survey results. The survey project targeted all the dairy processing members of the Dairy Processors Association of Canada (DPAC -17 companies) and all the dairy processing members of the Western Dairy Council who were not also members of DPAC (six companies). An additional 19 dairy processing companies operating in Canada and internationally were contacted along with three dairy and food industry associations. Two additional interviews were held with a BC university and a BC Government department for information verification. Interview requests were made with Chief Executive Officers and Senior Vice Presidents. Given the COVID 19 worldwide pandemic travel restrictions, all interviews were conducted at a distance. All the interviews were carried out virtually via ZOOM video recording (except for two completed via telephone) between the beginning of April and the end of June 2021. The vast majority of the 26 interviews held lasted a full hour. All interviews were completed in English or French by the same consultant to facilitate candid discussion and to ensure consistency and accuracy of the qualitative survey results. Each interview, recorded with permission, was reviewed to ensure that all relevant information was fully captured in the report. Some companies declined the request for an interview while others deferred to their industry association.

Individual interview responses and the details of individual engagements and consultations with processors were kept confidential from BC Dairy and all key stakeholders.

Given the relatively high participation rate (26 out of 45) and the senior level direct engagement in the interviews, it is fair to conclude that dairy processors across Canada were pleased to participate and share their responses with BC Dairy.

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This has been a very unusual and difficult year. The global pandemic with COVID-19 has been very hectic for everyone including Canada's dairy processing sector.

The interview questions



The following 14 questions were sent to the participants once they agreed to participate in the actual virtual interviews.

- 1.** In terms of dairy product innovation and processing growth, how do market forces regionally, nationally, and internationally drive your investment decisions?
- 2.** Are there any notable changes in the customer environment that affect those processing investment decisions?
- 3.** What are the barriers that your company faces in developing new dairy products? Is access to the retail environment a barrier?
- 4.** Are there any regulatory or legislative changes that should be made in Canada or British Columbia to encourage dairy processing or new product development?
- 5.** There are milk classifications (1c / 4c) that offer attractive prices and availability of milk for new products. (Western Milk Pool Innovation Program- new products approved by provincial authorities for an introductory period). Is your company aware of this and has your company utilized these milk classifications in developing new products? If so, was the introductory period long enough?
- 6.** Apart from lower priced milk for an introductory period for new products what other product development incentives or requirements would be of assistance to your company?
- 7.** What can be done to incent processors currently operating in British Columbia/ Western Canada to add new product lines to their current operations?
- 8.** What can be done to attract processors that are operating in other areas of Canada, or globally, to open a new operation in British Columbia?
- 9.** What can dairy farmer producers do to help processors succeed when they do make investments in our market?
- 10.** Are there any technologies- such as new packaging and processing equipment- that you wish you had access to at your company?
- 11.** Do you have any milk quality concerns with the milk supply from Western Canada and are there any other milk quality factors or aspects that dairy farmers should be focussing on?
- 12.** Does your company access dairy promotion funds to encourage retailers to highlight Canadian products?
- 13.** How important are export markets for your future business?
- 14.** What will a post-pandemic world (the new normal) look like for your dairy processing company?

The survey results

1. In terms of dairy product innovation and processing growth, how do market forces regionally, nationally, and internationally drive your investment decisions?

Most of the companies interviewed mentioned that this year has been unusually difficult due to COVID 19 and the disruptions that the global pandemic has brought to their sector. The pandemic has slowed plans for innovation. Supply chains for ingredients and packaging materials were turned upside down.

One of the biggest challenges right now in dairy processing is the low profitability in the sector, particularly in the fluid milk sector. Processors reported that their profit margins for fluid milk are so low that they can't justify making new investments.

Several mentioned that although we are in a time of record low interest rates, any new innovation projects still need to show a return on investment. Market forces also dictate that when a dairy processor is investing in a brand new facility to make a new product, then that facility is typically built in a geographic location that can best supply the greatest number of customers across Canada.

Due to the recent trade deals with Europe, the Trans Pacific and here in North America, retailers can import high quality cheeses for less cost than what Canadian cheese processors can make them for. There is huge uncertainty and caution as each new year opens up a larger amount of dairy product import quota. The recent United States challenge of Canada's dairy tariff rate quotas under the Canada-United States-Mexico Agreement brings more uncertainty to the marketplace.

Larger companies follow a clear process for capital investments and improvements each year. Many have a set amount of capital budgeted for the year with funds first allocated to maintenance and facility upkeep and then for strategic investments. For some companies where many different products are manufactured, including foods other than dairy, different divisions compete for capital based on the expected return on investment. Factors such as where the milk supply is, where they can process the new products utilizing as much existing equipment alongside new equipment and proximity to the market are all key considerations.

2. Are there any notable changes in the customer environment that affect those processing investment decisions?

Almost all the processors responded that consumers now have a wealth of information at their fingertips. With a company website and a social media presence, processors receive timely feedback from consumers. Processors express that they see consumer concerns over the treatment of animals, about traceability and about climate change and the environment that are driving their purchasing decisions. Competition from plant-based beverages such as oat beverage and almond beverage is on the rise.

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Many Canadians now prefer to eat their dairy products rather than drink them.

Butterfat is back in vogue with new science refuting old health concerns, so sales of butter and cream are way up. High fat yogurts are selling well along with more offerings of organic, natural, and grass-fed dairy products. New aseptic processing lines are allowing companies to process long shelf-life dairy products in one single Canadian facility to supply the entire Canadian marketplace.

Millennials think differently about milk products. Many Canadians now prefer to eat their dairy products rather than drink them. Large global nutrition companies continue to develop products that target older people and healthy aging. Milk protein is the backbone of many of these products.

Consumers want products that will save them time, that will be better for them, that are added value, and that are sold in sustainable packaging. Consumers are concerned about so much plastic material used in food packaging- investment decisions need to take into consideration the recyclability and amount of plastics used.



3. What are the barriers that your company faces in developing new dairy products? Is access to the retail environment a barrier?

The most common response from dairy processors is that access to the retail environment in Canada is a barrier to developing new products given the power of the few retailers who control 80% of the retail market and the very high fees they charge for shelf space for every stock keeping unit (SKU). Typically, dairy processors in Canada sell most, if not all, their dairy products to retailers who in turn sell the products to consumers. Many retailers have been unilaterally changing the terms of the contract and imposing extra fees and penalties. That practice is affecting the entire food processing sector. As a result, Canadian food processors, including dairy processors, are all calling for the adoption of a Grocery Code of Conduct. According to the Dairy Processors Association of Canada “the introduction of grocery codes of conduct has helped other countries like the United Kingdom, Ireland, and Australia to create a balanced, competitive environments which strengthen the domestic food supply”.

Many dairy processors responded that there is only so much space on the retail shelves and listings are prohibitively expensive. When they introduce a new SKU, they usually need to retire an old one. Although the space in dairy aisles is tight, they need to maintain strong turnover of product to stay on the shelf despite the listing fees. Some products have been eliminated by retailers when they do not see enough daily/weekly sales.

Smaller dairy processors report challenges even getting a meeting with retailers to introduce their products. The high cost of doing business with major retailers limits the ability of small and medium-sized processors to get their products to consumers.

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The high cost of doing business with major retailers limits the ability of small and medium-sized processors to get their products to consumers.

Fluid milk processors reported that there is so little profit margin on their product that when retailers expect them to participate in sales on these products, there is often little margin left to give. Some reported that there is currently excess fluid milk processing capacity in Canada. It is exceedingly difficult to prove any type of return on investment in new processing capacity in fluid milk production.

Another barrier commonly reported was that research and development in and of itself is difficult to justify when a company is facing low profit margins versus needed investment in capital required for plant upkeep and renewal. When introducing a new product, a processor is taking all the risk.

There is a lack of qualified and reliable personnel to work in dairy processing facilities. It is particularly challenging to attract talent to move to the BC lower mainland where the cost of housing is so high. Low profitability is impeding the sector's ability to pay higher salaries. This is a challenge for the entire food sector.



4. Are there any regulatory or legislative changes that should be made in Canada or British Columbia to encourage dairy processing or new product development?

A couple of respondents specifically highlighted that they have an excellent relationship with BC Milk Marketing Board. They found the Board to be very supportive and helpful when they first launched their new products, and very service oriented. It was reported that BC Milk Marketing Board is much easier to work with and much more flexible than boards in some other provinces.

However, almost all the dairy processors responded that the current milk regulatory system in Canada is far too complex. There are too many different classes of milk, too many different prices and too many different agencies controlling the system across Canada. The milk classification system has too many different raw milk prices for different types of cheese. These price differences discourage innovation because cheeses compete with other cheeses, and now with a growing amount of high quality lower-priced imported cheeses. The downside to these different classes of milk is that it causes great price differences in different types of cheese, and even price disparity for the same type of cheese, such as mozzarella for pizza vs mozzarella for retail.



Many reported that they are stuck between a highly regulated system in which raw milk prices and price increases are set by the Canadian Dairy Commission on the one hand and on the other hand they must sell to retailers in a system in which retailers hold all the power due to the concentration of retail outlets within very few corporations. Some pointed to provinces like Quebec and some provinces in the Maritimes where there are regulated minimum and maximum allowable retail prices for fluid milk to protect the processing sector. These minimum prices at retail do not exist in other provinces. The price of four litre jugs of milk in British Columbia is often priced as a loss leader. Many processors believe this undermines the real nutritional value of milk compared with other beverages sold at retail and may well be inadvertently encouraging the growing demand for non-dairy plant-based beverages which may be perceived to be of greater value.



Smaller on-farm processors in British Columbia who have their own dairy farm and who process all the milk they produce in their own processing facility are discouraged that they must first sell all their raw milk to the milk board and then buy it all back at a considerably higher price than they sold it for due to milk pooling arrangements.

Recent trade agreements in which Canada has given new access to imported dairy products via import quotas allocated directly to retailers has exacerbated Canadian dairy processor competitiveness issues.

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The current milk regulatory system in Canada is far too complex.

Other regulatory changes that would help some processors include changing the required wording of “modified milk ingredients” to simply “milk ingredients” and amending other regulations that would allow for the addition of vitamins and probiotics to any dairy products as is done in other countries. Others commented that differing regulated container sizes for dairy products in different provinces across Canada are a needless barrier to innovation and that all those restrictions should be taken off the books.

5. There are milk classifications (1c / 4c) that offer attractive prices and availability of milk for new products. (Western Milk Pool Innovation Program – new products approved by provincial authorities for an introductory period). **Is your company aware of this and has your company utilized these milk classifications in developing new products? If so, was the introductory period long enough?**

Many processors reported having used this program but feel that a four-year time span would be better. Three years from concept to market is barely enough time. Others were not aware of this program when they introduced their product to the market.

The program seems to be focused on the butterfat component of milk and should be expanded to include allocation based on other milk solids.

6. Apart from lower priced milk for an introductory period for new products what other product development incentives or requirements would be of assistance to your company?

Several of the large dairy processors that operate in many different parts of the world do not require any assistance with product development. They have very well staffed and equipped R&D labs and are able to draw on their knowledge and successes of product launches elsewhere. However, many of the medium and small dairy processors mentioned that they would appreciate a food development centre modeled on the Guelph Food Innovation Centre at the University of Guelph, Ontario and to some degree, the one in Leduc, Alberta. It was noted that it really needs to be a food center that has a commercial application and not just a theoretical research center often found at universities. The Guelph Food Innovation Centre at the University of Guelph was most often mentioned as a working model.

Processors responded that lower raw milk prices for an introductory period for new products are appreciated. However, suggestions were made that the program could include some form of shared risk. When processors develop a new product, they are taking all the risk and if the product fails, they suffer all the consequences.

A few companies responded that they would appreciate a truly knowledgeable dairy technical person who could help them with their product formulations and process controls. They have access to those experts in Ontario but have not found that expertise in British Columbia.



7. What can be done to incent processors currently operating in British Columbia/Western Canada to add new product lines to their current operations?



By far the most frequent response to this question is that when processors decide to make a major decision, say in expanding their processing capacity with a brand-new piece of equipment, it is essential that they be sure of a sufficient milk supply. One of the barriers to them is the amount of the capital required. They need a substantial amount of raw milk to support that capital investment and they must be assured an adequate long-term supply.

Milk supply in western Canada and in British Columbia is seen as less restrictive than in other provinces. There is also the overall impression that the western milk pool is working hard to ensure milk moves to where it is needed. This will continue to incent processors who currently operate in western Canada.

If the BC Government were to design a program that allowed the dairy processors to use the Carbon Tax collected from them for energy efficiency improvements, it would act as a great incentive. Energy consumption in dairy processing facilities is significant.

8. What can be done to attract processors that are operating in other areas of Canada, or globally, to open a new operation in British Columbia?

For many of those dairy processing companies that are currently not operating in British Columbia, the issue of a reliable supply of raw milk was listed as one of the top possible attractions for them to consider opening a new operation within the province. Others are seeking a supply of grass-fed milk and would be attracted to British Columbia if there were a large enough amount offered.

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We need assurances that we will get a steady supply of milk with a guaranteed consistent quality.

Several companies mentioned that if they could find a co-packer in British Columbia that could produce products to their high-quality standards that they would consider forging a long-term alliance with them. They are shipping product into the Vancouver area a long distance away from eastern Canada and the transportation cost savings would be significant. Others responded that if there were a dairy or food processing company that had a processing facility that was in good condition and was of a sufficient size and whose owners

are considering selling the facility then they would like to be informed. A few mentioned that they had never considered British Columbia as a location for dairy processing and that they have never been approached by anyone from the province and would most definitely be interested in learning more.

Other companies are quite unsure of the future given the recent renegotiation of the North American Free Trade Agreement which granted the United States much more access to the Canadian market via increased tariff-free quota access for dairy products.

Concerns about expensive land and housing in the Lower Mainland due to the limiting geography, and concerns about access to labour and qualified personnel remain a deterrent to expansion in the province of British Columbia.



9. What can dairy farmer producers do to help processors succeed when they do make investments in our market?

Many dairy processors commented that what dairy farmers can do to help processors succeed is for them to be the absolute best dairy farmers in the world. This includes every aspect of the farming operation including; milk quality and cleanliness, animal welfare and husbandry, environmental stewardship, manure management, sustainability, and energy efficiency. Processors are counting on their main suppliers, BC's dairy farmers, to be best of class. Farmers need to be "audit and tour ready" all the time. Consumers are becoming more demanding. Programs like the Dairy Farmers of Canada proAction are very much welcomed by processors.

Many processors commented on the recent news stories of the use of palm fat supplements in dairy cattle feed. Processors would like to work more closely with their dairy farmer suppliers to outline their needs and raw milk specifications.

Many processors want dairy farmers to fully understand that when the price of raw milk increases, dairy processors are often not able to pass those cost increases on to the retailers resulting in significant margin squeeze for processors.

Three processing companies specifically responded that dairy farmers could help them succeed in the British Columbia marketplace by investing sufficient capital along with them. However, they would want to manage the business and use their brands and knowledge to build a successful British Columbia dairy processing facility.

A few reiterated that dairy farmers could help them succeed by providing a reliable supply of grass-fed milk. Others mentioned that they would like to operate in a system that was more transparent and predictable in terms of weekly updates on expected milk deliveries especially in the fall when milk supply is tighter and deliveries of raw milk to processing companies are sometimes shorted.

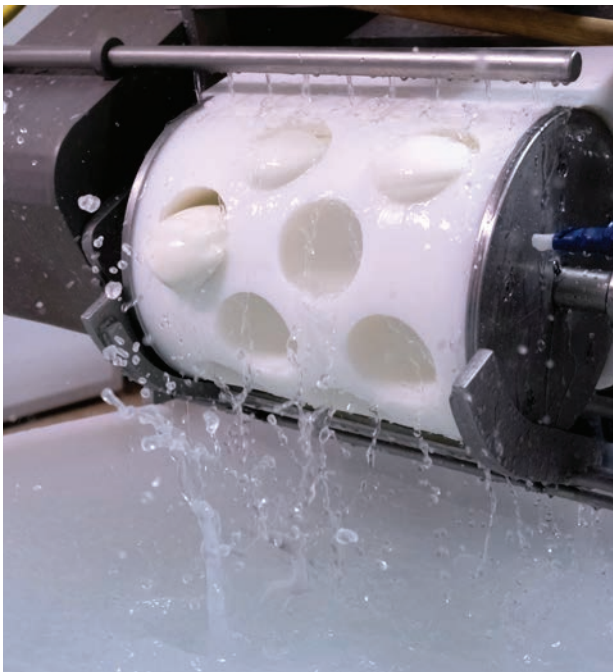




10. Are there any technologies, such as new packaging and processing equipment, that you wish you had access to at your company?

Milk is 87 percent water and only 13 percent solids. The industry greatly values the butterfat (4%) and the proteins (3.5%), but the lactose (4.7%) has little value, the industry needs to find a way to fully exploit that with new technologies.

One processor mentioned that they plan to invest in a reverse osmosis unit for their cheese production, if they can make the business case for it, and there is a good return on their investment in a short enough time.



High Pressure Processing of post packaged cheese products is another technology that some wish they had access to so they could make a “clean” label declaration.

Several companies reported that Canada’s milk and whey dryers are getting old and need to be updated. They will not last forever. Dairy processing equipment is awfully expensive. There are lots of newer more efficient pieces of equipment that companies would access if they had sufficient capital and return on investment. Many look to Europe for new dairy processing and packaging equipment. Comments were made that dairy processing companies would like to work more closely with dairy farmers and have some productive discussions around joint investment in some new high capacity strategically located milk and dairy ingredient drying facilities. This is seen as essential to the overall management of Canada’s dairy supply management system.



11. Do you have any milk quality concerns with the milk supply from Western Canada and are there any other milk quality factors or aspects that dairy farmers should be focussing on?

One major processor pointed out that the fact that rBST has never been used in Canada is a real attribute for them. Most all the respondents stated that milk quality is always a priority for their company. Raw milk quality has a direct impact on the quality and shelf life of their dairy products. One bad incident of a poor-quality product can lead a customer to switch brands. Rapid milk testing equipment to quickly determine the bacterial quality of raw milk loads has been adopted by some dairy processors as a part of their quality control continuous improvement strategy.

Most reported that the quality of milk in BC has been particularly good. Consumers are becoming ever more demanding in their dairy product quality expectations so continuous improvement of the raw milk supply is key.

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Milk for cheese needs to be of the highest quality especially for aged cheeses.

Several of the cheese making companies responded that milk for cheese needs to be of the highest quality, especially for aged cheeses.

12. Does your company access dairy promotion funds to encourage retailers to highlight Canadian products?

Most of the dairy processing companies reported putting the DFC Blue Cow logo on their products when possible. All of those that did use it received no compensation from the Dairy Farmers of Canada. Many appreciated BC Dairy's willingness to participate in branded product promotion. None of the processors supported generic dairy product promotion and many believe that dairy farmers should focus their promotion funds on educating consumers on the nutritional benefits of milk and milk components.

Some smaller processors see the Blue Cow as more appropriate for a national product whereas they would prefer to use a BC dairy logo locally.

Two companies mentioned that access to marketing information such as AC Nielsen data through BC Dairy for product development purposes would be of great assistance to them.

13. How important are export markets for your future business?

Many of the companies responded that they will not be seeking export markets for their products and will focus only on the Canadian market. This is due to the Canadian Dairy Commission ending its export assistance program in December of 2020.

Others believe that British Columbia is ideally suited geographically to provide premium dairy products to the huge market in Asia. Vancouver has Canada's largest and most diversified shipping port and a world class international

airport. Two companies specifically requested help in finding a partner in Asia to sell their products. A group representing Quebec's dairy industry says it is eyeing a special government designation for the term "poutine" to better promote it internationally. They believe that Canada has a huge opportunity to supply the international market with Canadian made frozen poutine, a mixture of Canadian cheese and Canadian potatoes. British Columbia would be an attractive base for them to launch their products from.

A dairy ingredient processor responded that exports are critical to their business. They export their specialized milk components to over 20 countries. They rely on the Canadian Food Inspection Agency to issue export certificates promptly and accurately. The Trade Commissioner Service of Global Affairs Canada, an extensive resource around the world, is also available to Canada's food exporters.



14. What will a post-pandemic world (the new normal) look like for your dairy processing company?

The COVID-19 pandemic turned supply markets upside down and brought huge uncertainty. Orders from food service plummeted while demand for mozzarella cheese on pizza toppings and butter for home baking surged.

Product development and product launches were delayed. Many Canadian processors used to travel to major international equipment and food shows in Europe and USA in search of new innovative equipment to use.



Most companies reported weathering COVID-19 reasonably well despite the ongoing challenges. Some had learned a lot from the 2003 SARS event in Toronto and were well prepared as a result. Others benefited from the knowledge shared by their parent companies that were in the thick of COVID outbreaks in other parts of the world before major outbreaks were affecting Canada.

Most companies will continue with increased hand sanitation and masking protocols to reduce sickness amongst workers. Demand will change again if consumers go back to eating out as much as they did prior to the pandemic. COVID has, however, accelerated plans to market some dairy products directly to consumers online.

List of Barriers to Dairy Processing Innovation and Capacity Growth

- Low profitability in dairy processing
- Excessive fees and penalties charged by grocery retailers
- Uncertainty in the marketplace due to recent international trade deals
- Overly complex milk marketing regulatory system
- Low availability of BC commercial space
- Expensive BC real estate
- Lengthy BC municipal approval processes
- High capital cost of new processing facility set up
- Lack of general and qualified personnel
- Distance from major Canadian customers and consumers
- Changing consumer expectations and preferences
- Lack of scale in the marketplace due to low Canadian population and no export opportunities (many companies can already supply the entire Canadian marketplace from one facility)

List of Opportunities for Dairy Processing Innovation and Capacity Growth

- Guaranteed supply of high-quality BC raw milk supported by the western milk pool
- Growing affluent diverse population
- Differentiated BC raw milk supply
- Assignment of all dairy import quotas to Canadian and BC dairy processors
- Promotion of commercial opportunities to processors currently operating outside of BC
- More knowledge transfer and assistance to smaller companies with product formulation, innovation, and process controls
- Co-packing with underutilized BC processing capacity or with a dedicated new dairy processing facility
- Partnerships between BC cheese makers and BC wineries
- Identification of underutilized cheese processing capacity through BC Artisan Cheese Association
- Connection of BC dairy processors with Feed BC to get more dairy products into BC government supported institutions.
- Access to new funding under the new British Columbia Economic Development Agency for dairy processing expansion and innovation.
- Export sales of premium BC dairy products to Asia.
- Upgrading of provincially inspected dairy processing facilities to federal standards so that their products can be sold inter-provincially.
- Connection with BC's First Nations who could provide needed land, people, and opportunity for joint economic development.

Recommendations

Following the completion of the interviews with dairy processors, a draft report was produced and circulated to members of a Steering Committee with representatives from BC Dairy, BC Milk Marketing Board, the Western Dairy Council, Food & Beverage BC and BC Ministry of Agriculture, Food and Fisheries. In addition, presentations of the draft report were made to the boards of directors from BC Dairy, BC Milk Marketing Board, the Western Dairy Council, and the Mainland Milk Producers along with several staff from BC Ministry of Agriculture, Food and Fisheries.

It is anticipated that this final report will provide the foundation and direction for much post-report discussion and action planning. The recommendations are focused on what should be done and not specifically on how. Some of the many opportunities outlined in this report were noted in discussions with stakeholders after the interviews of processors. For instance, there were some excellent comments provided by stakeholders on the potential involvement of First Nations in plans to expand the dairy processing capabilities of British Columbia's dairy industry; the potential to link BC cheese processors with BC wineries; and the potential to upgrade BC's provincially inspected dairy processing facilities to federally inspected ones. The numerous opportunities and barriers identified formed the basis of the recommendations.

From the many interviews with dairy processors and the subsequent consultations with stakeholders the following recommendations were made:

1. It is recommended that a full-time industry-led Business Development Officer be hired to focus on dairy processing expansion and innovation in the province of British Columbia.

According to the National Occupation Code 4163 "Business development officers and marketing researchers and consultants conduct research, formulate policies and manage programs to stimulate industrial and commercial business investment or tourism in urban and rural areas, or to promote commercial or industrial products and services". The Business Development Officer could link processors currently operating outside of British Columbia to those with excess capacity inside the province and with those inside the province who would like to be equity investors in

a new venture facility; help processors access funds under the new British Columbia Economic Development Agency, or other national and provincial funding programs, for dairy processing expansion and innovation; coordinate a marketing study of potential premium BC dairy product sales to Asia; work with BC Artisan Cheese Association to identify excess cheese processing capacity; and work with BC's First Nations who could provide needed land, people, and opportunity for joint economic development;

2. It is recommended that BC Dairy and BC Milk Marketing Board continue to fully support the dairy processor advocacy efforts surrounding a legislated, mandatory, and enforceable Grocery Code of Conduct and the exclusive allocation of dairy product import quota to Canadian dairy processors.

Virtually all the representatives of dairy processing companies that participated in the interviews highlighted these two issues. Given the low profitability and the uncertainty surrounding the future competitiveness of the Canadian dairy processing sector due to increasing imports of dairy products following the ratification of new trade agreements, it is crucial that dairy farmers support their direct customers, the dairy processors.

In a report released in July of 2021 by the Federal-Provincial-Territorial (FTP) Working Group on Retail Fees (established by FTP Ministers of Agriculture in November of 2020) it was acknowledged that the relationship between large retailers and their suppliers is problematic, and that the scale and the way retailers' fees are imposed can dampen investment and innovation within Canada's food processing sector.

3. It is recommended that BC Milk Marketing Board work with other provincial milk marketing boards and Canada's dairy processors to simplify Canada's milk classification and pricing system.

The issue of the current milk classification and pricing system was raised by almost every company interviewed. Many countries around the world have a significantly simpler system. Many have only two classes of milk, one for fluid milk, and one for all other products. The United States has a Federal Milk Marketing Order Program with only four uniform milk classes and prices throughout the system. Processors view the current Canadian system as overly complex. Sub-classification of products such as in the cheese category is viewed as a significant barrier to innovation and production decisions.

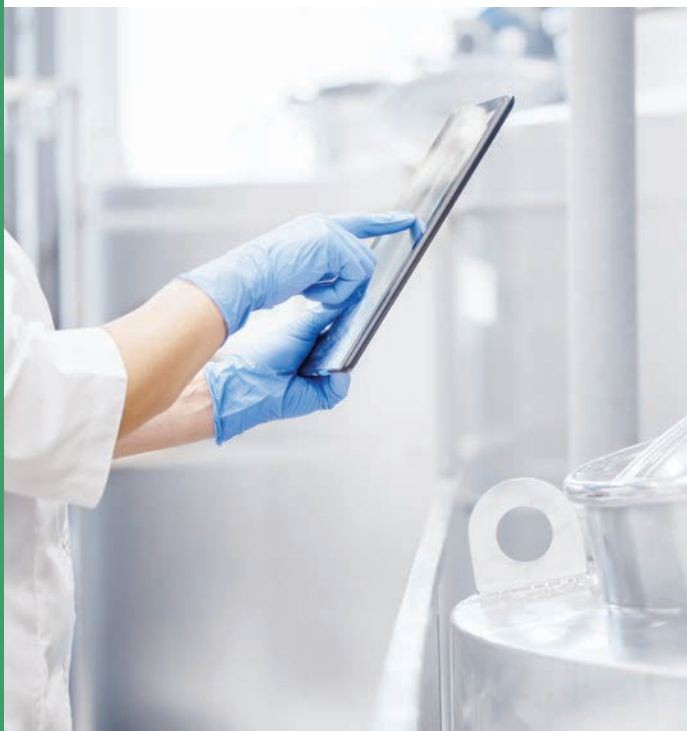


4. It is recommended that an industry-led Dairy Processing Specialist be hired to help British Columbia’s dairy processors with their product innovation and new product formulation.

Small to medium sized companies would appreciate a truly knowledgeable dairy technical person who could help them with their product formulations and process controls. A Dairy Processing Specialist could also assist provincially inspected dairy processing facilities to upgrade to federal registration so that they could access markets across provincial boundaries. There are currently no dairy

processing specialists on staff with the BC Government. Currently in British Columbia, all dairy facility design, expansion plans, regular inspections, audits, processed product testing protocols, and follow-up on unacceptable product tests results are handled solely by the BC Centre for Disease Control (BCCDC). BCCDC is focused on public health and food safety outcomes of dairy processing.

5. It is recommended that a dairy processing co-packing facility be established to facilitate dairy processing capacity expansion and innovation in the province of British Columbia.



Several companies interviewed expressed a willingness to process some of their products in the province of British Columbia if they could find a suitable co-packer who could produce the products to their standards. A newly established co-packing facility would be a great attraction. It could also attract smaller companies that have no processing capacity and larger companies wishing to run test batches in smaller quantities than they could in their own facility.

The BC Food Hub Network aims to foster growth and innovation in the processing sector through improved industry access to facilities, equipment, technology, technical services and business support. However, none of the facilities to date is designed to process dairy products.



6. It is recommended that the BC Government amend its Milk Industry Act and the Milk Industry Standards Regulation to remove all limits on the sale of dairy products to packages of specified size, weight or by dimensions or by volume.

Section 40 - 3(k) of the BC Milk Industry Act gives power to the Lieutenant Governor in Council to create regulations (k)limiting the sale of dairy products to packages of specified sizes, and specifying the sizes of the packages by weight or by dimensions or by volume.

The BC Milk Standards Regulation Section 5 (3) Subject to subsection (4), no person shall, by way of wholesale or retail, offer for sale, place on consignment for sale, sell, distribute or supply reconstituted milk or any other dairy product in fluid form unless (a)it is stated on the package containing the dairy product that the volume of its contents is one of the quantities set out in Schedule G.

SCHEDULE G

[am. B.C. Regs. 72/87, s. b; 474/98, s. (b)]

CONTAINER VOLUMES

- | | |
|---------------------------|---------------------------|
| 1. 250 millilitres | 5. 4 litres |
| 2. 500 millilitres | 6. 20 litres |
| 3. 1 litre | 7. 375 millilitres |
| 4. 2 litres | |



These regulatory restrictions are a concern to dairy processors in the province and remain a barrier to innovation. Other competing beverages sold at retail do not have such prescriptive regulatory limitations on the size and weight of packages that they may be sold in. The Milk Industry Act and Milk Industry Standards Regulation should be amended as soon as possible.

Appendix A

Companies Interviewed (April to June 2021)

1. **I-Nov Grand Pré**
2. **Vitalus**
3. **Quality Cheese**
4. **Punjab Milk Foods – Nanak**
5. **Betterwith Foods Inc.**
6. **Lactalis Canada – Calgary**
7. **Gay Lea Foods**
8. **Lactalis Canada Ottawa**
9. **Agrifoods Cooperative**
10. **Bel Cheese Canada**
11. **Dairy Processors Association of Canada**
12. **Western Dairy Council**
13. **Fromagerie Bergeron**
14. **Fromagerie Boivin**
15. **Avalon Dairy**
16. **Kraft Heinz Canada**
17. **Danone Canada**
18. **Foothills Creamery**
19. **Amalgamated Dairies Ltd**
20. **Saputo**
21. **General Mills Canada**
22. **BC Food and Beverage**
23. **Donia Farms**
24. **Chapman’s Ice Cream**
25. **Kootenay Meadows**
26. **Blackwell Dairy Farm**



Innovation – What is it?



A new idea, method, or device.
The introduction of something new.



Innovation = Invention x Commercialization



Innovation is about responding to change in a creative way. It's about generating new ideas, conducting R&D, improving processes or revamping products and services.



The word "innovation" is derived from the Latin verb innovare, which means to renew. Innovation is a process by which a domain, a product, or a service is renewed and brought up to date by applying new processes, introducing new techniques, or establishing successful ideas to create new value.

Appendix C

Milk Production in Canada – a Positive Story

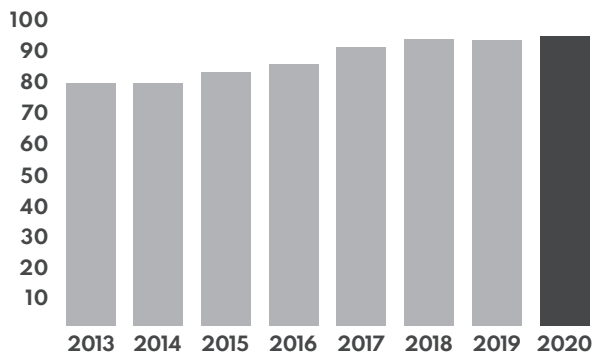
Milk Production at the Farm in Canada
(Calendar Year – 2013 to 2021) (Hectolitres)

Calendar Year	British Columbia	Alberta	Saskatchewan	Manitoba	Ontario	Quebec	New Brunswick	Nova Scotia	Prince Edward Island	Newfoundland and Labrador	Total Canada
2021* (JA-JN)	4,294,702	4,261,296	1,478,297	2,109,141	15,411,274	17,267,033	800,716	1,048,285	614,226	240,247	47,525,217
2020	8,496,228	8,173,161	2,970,890	4,124,312	30,882,783	33,639,128	1,539,968	2,037,666	1,174,609	467,779	93,506,525
2019	8,410,883	8,175,197	2,965,419	4,120,068	30,111,171	33,293,879	1,520,602	2,012,211	1,165,570	484,935	92,259,935
2018	8,129,011	8,162,489	2,907,225	4,091,343	30,077,454	33,656,892	1,586,820	2,066,345	1,207,173	497,736	92,382,488
2017	7,938,204	7,686,981	2,684,767	3,789,584	29,611,927	32,908,161	1,544,450	2,018,380	1,172,906	486,513	89,841,872
2016	7,348,770	7,328,834	2,548,929	3,412,048	27,988,807	31,158,769	1,443,678	1,891,504	1,102,173	481,405	84,704,919
2015	7,221,505	7,015,384	2,426,736	3,450,720	26,921,164	30,016,781	1,394,496	1,804,153	1,032,523	483,413	81,766,876
2014	6,905,218	6,687,280	2,337,258	3,272,573	25,472,680	29,065,501	1,325,700	1,738,136	990,712	464,796	78,259,854
2013	6,714,342	6,537,742	2,312,835	3,171,474	25,476,072	29,390,984	1,359,609	1,739,801	1,021,361	473,746	78,197,966

* Last year cumulative from January 2021 to June 2021

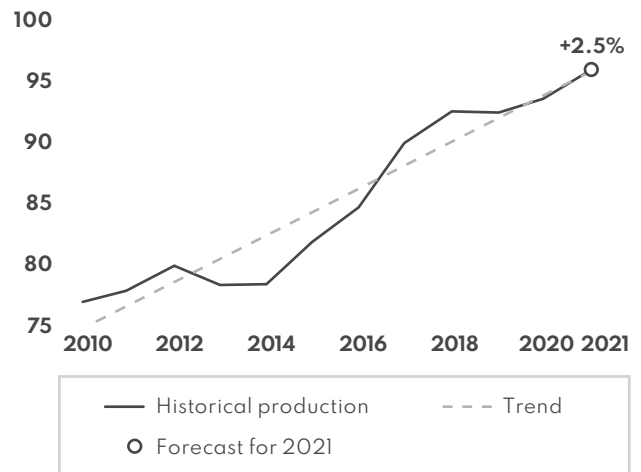
Source: Canadian Dairy Information Centre (CDIC)

Canadian Milk Production at the Farm
(Hectolitres produced in Millions)



Source: Canadian Dairy Information Centre (CDIC)

Milk Production in Canada
(Million HL)



Source: Farm Credit Canada (FCC) forecast based on Statistics Canada Historical Production table 32-10-0113

The Agricultural Consultant

James Laws, P.Ag. has an extensive background in agriculture with over 40 years of work experience. He has worked across Canada in a variety of senior agribusiness-related roles and has lived and worked overseas on international development projects as well as private-sector farm operations. His current employment as an Agricultural Consultant has led him to work overseas including in Suriname, Senegal, and Tanzania.

Prior to starting his consultation business, he served as the Executive Director of the Canadian Meat Council from 2004 to 2016 and was the Executive Director of the Canadian Farm Business Management Council from 1999 to 2003. He has also been serving on Farm Credit Canada's Board of Directors since 2017.

Mr. Laws holds an Honours B.Sc. in Agriculture with a specialization in Dairy Science from the University of Guelph and a Professional Agrologist designation from the Ontario Institute of Agrologists. He is fluent in English and French and has a working knowledge of Spanish.





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