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FOOD, CANADA Canada's food & beverage processing magazine

Meat's next move

The meat industry diversifies to meet changing consumer demand PG.18 Inside: ACCENT ALIMENTAIRE SUR LE QUÉBEC PG.33

BUGGING OUT

Edible insects are heading to Canadian grocery shelves PG, 24

PLUS

The ROAD forward

Special report on logistics in the food & beverage industry PG, 27

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Protein by any other name

One of the most memorable food shows I've ever attended was a showcase for the international meat sector, held in Germany. As I dashed from one hall to another along a moving walkway with hundreds of other visitors, I was awed by both the physical size of the event, and by the magnitude of the meat sector represented there.

That's why I wasn't surprised by the uproar following the announcement last month by German environment minister Barbara Hendricks that meat and fish would be banned from all official ministry events. Hendricks may have been coming from a sustainability point of view, citing meat consumption as bad for the environment, but her decision could also reflect the fact that there have been numerous studies in recent years showing that lowering red meat consumption is better for your long-term health.

Regardless of your view on meat consumption, consumers around the world are already taking note. Driven by concerns over health, the environment and animal welfare, consumption of all meats in Canada dropped roughly 10 kg per capita from 1980 to 2015, according to Agriculture and Agri-Food Canada. The type of meat consumed has also changed dramatically. For instance, in 1980 Canadians ate 22.30 kg of poultry (chicken, turkey and fowl) per capita; 41 kg of beef, veal and lamb; and 32.16 kg of pork. By 2015 those numbers had shifted, with Canadians consuming 39.14 kg of poultry; 26.31 kg of red meat; and 22.63 kg of pork that year. Interestingly, egg consumption, which sat at 21.96 dozen per capital in 1980, declined steadily throughout the 1980s and 1990s based on the low-cholesterol messages of the time, only picking up again in the late 2000s, to sit at 19.40 kg in 2015.

While the Canadian meat industry is working to meet current consumer thought on humane animal production and processing, some companies are realizing that to survive they must diversify, offering a wider range of protein alternatives to meat. By expanding their portfolio of protein, producers are complementing rather than challenging their existing red meat and poultry products, offering more for the increasing number of "flexitarian" consumers whose diet choices may vary significantly from week to week.

That's why our March issue, traditionally "the meat issue," is now officially the "protein issue" in recognition of the ever widening arena of protein sources now available to consumers. Let's hope the next revision of Canada's Food Guide reflects some of the changing realities in the world of protein as well.

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Oreo beer

The headline pretty much says it all, even if it is hard to believe. A Richmond, Va.-based brewing company has created a craft beer that is fermented in hundreds of pounds of Oreo cookies, reports UPI.com. The Veil Brewing Co. says it took its Hornswoggler milk stout and conditioned it using Oreo cookies to create the Hornswoggler with Oreos. The cookie-infused beer was released in limited quantities of 16-oz cans in January and quickly sold out.



News>file



Making animal transport more humane

The Canadian Food Inspection Agency (CFIA) announced late last year that it was seeking the public's input regarding proposed amendments it has made to the *Health of Animals Regulations: Part XII* — the part that deals with humane transportation.

The current regulations were developed in 1977. But more recent scientific evidence, says the CFIA, shows that transportation can be one of the most stressful experiences for animals, when animal welfare is not taken into account and addressed. The Health of Animals Regulations (HAR) do not reflect current science regarding the care and handling of animals, and frequently do not take the physical, behavioural, and physiological needs of animals into consideration.

In addition, HAR does not consistently align with current, generally accepted industry practices. The regulations are also not consistent with the standards of Canada's national trading partners, such as the U.S. and the EU, nor do they meet the World Organization of Animal Health's welfare standards. The lack of consistency could hamper Canada's market access in the future. According to the *Canada Gazette*, a recent European survey concluded that 93 per cent of Europeans agree it is important to establish animal welfare standards that apply to products sourced from within and outside of the EU.

The CFIA says the amendments are intended to:

- Provide clarification by adding definitions (for example, definitions for compromised and unfit animals) and establish clear end results for industry and transporters to better understand what is required;
- Reduce the time intervals that animals in transport can be without access to food, water and rest;
- » Establish clear end results that better reflect animals' needs and current industry practices; and
- » Better align with Canada's international trading partners and the OIE animal welfare standards for animals transported by land, air and sea.

SIAL 2017

SIAL Canada is back! The show, which is in its 14th year, runs in Toronto from May 2 to 4. The biggest food-innovation trade show in Canada alternates every year between Montreal and Toronto.

This year, the EU is the region of honour and will have 240,000 sq. ft. of dedicated exhibition space. With CETA

FOOD FRAUD TOP OF MIND WITH CONSUMERS

A new study from Dalhousie University in Halifax has found that Canadian consumers are growing increasingly concerned about whether they are really getting what they paid for. In fact, 63 per cent of Canadians surveyed say they are generally concerned about food fraud, the practice of mislabelling, adulterating or counterfeiting food products.

The study, Food fraud and risk perception: Awareness in Canada and projected trust on risk mitigating agents, also turned up strong evidence that food fraud is prevalent in the Canadian marketplace. Of those surveyed, 42.7 per cent believe they have bought a counterfeit food product at some point. Seafood and fish (27.9 per cent) was the top-selected category where fraud was experienced, followed by liquids such as oils and wines (20.9 per cent), fruits and vegetables (13.9 per cent), deli meats (11.6 per cent) and baked goods (9.3 per cent).



coming into force this spring, the EU section will offer Canadians a chance to get to know the industry there better.

Visitors will also find some exciting events returning again, including:

- » SIAL Innovation: The contest that highlights the most recent food trends. Stay tuned as the 10 finalists will be announced on April 20. The Grand Prize winner will be announced during the show.
- » Olive d'Or: Canada's biggest extra-virgin olive oil contest.
- » La Cuisine by SIAL: This year, La Cuisine will host specialists on two very popular topics, food-to-go and buying local.
- » **Fromage by SIAL:** The show expects more than 50 Canadian and international cheese producers.
- » A complete program of conferences on multiple topics. The show will also offer a lineup of experts covering

a wide range of food and beverage related topics: Dana McCauley (innovation); Gurth Pretty (cheese); Tia Loftsgard (organics); B.K. Sethi (ethnic foods); Carol Zweep (packaging); Franco Naccarato (buying local); Bob Bauer (FDA compliance); Frank Aulino (private label); Jane Dummer (health); Saad Kadiri (supply chain); and Christine Cheylan (olive oil).

SIAL has worked to make navigating the show easier for visitors this year. That's why it has created "paths" that allow for a customized, more efficient experience, whether visitors are looking for products that are gluten-free, organic, halal, kosher, fair-trade, regional or private label. This year two new paths have been added: supply chain and food-to-go. These paths are one of a kind in North America and are adapted to exhibitors' offerings within the various available product categories.

And don't forget SET Canada — the area dedicated to equipment, technology and service suppliers who meet the needs of food retailers, foodservice professionals and agri-food processors.

The show also supports charitable efforts through SoSIAL, a program dedicated to fight food waste and help those in need. For each SIAL Canada Toronto ticket sold, \$5 will be donated to the Daily Bread Food Bank.

SIAL spotlight

For more on the ethnic food market, *Food in Canada* spoke with B.K. Sethi, president and consultant of Toronto-based B.K. Sethi Marketing Ltd.

Q: What ethnic foods are hot in Canada?

A: "All ethnic foods are hot. The category is the fastest growing at this point at about 14 per cent per year. In Ontario or B.C. it's much higher. Today Indian, Pakistani and Bangladeshi foods are growing, followed by Thai, Vietnamese, Ethiopian, Philippino."

Q: How do you define ethnic food? /

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NEWS FILE

A: "Ethnic foods are culturally based and originate from the cultures of a particular region of a particular country. It used to be Canadian or Western food was seen as meat and potatoes. But then Europeans immigrated to Canada, and the interest was in pizza and pasta. But after 25 years or so no one really calls pizza and pasta ethnic food. If it wasn't for exposure to Mexican culture, we wouldn't know what an avocado is. We can't grow them in Canada. Now would avocado be considered ethnic? Not right now because it's becoming so popular. It's a health food. Guacamole might be more ethnic and it's basically avocado."



Q: What draws us to ethnic foods?

A: "Consumers' tastes change and they want variety. You don't want the same foods every day. It's human nature, which is triggered by the impact of ethnic populations assimilating into Canadian society. Today consumers travel further and a lot more and bring back a taste for the food they tried. The ethnic population is at about 20 per cent of the

HOT POTATOES

Canadian population. Their children all go to the same schools and interact. Kids may come home and talk about other kids' lunches. It's the assimilation of the new culture. I call it the Rubbing Effect. Finally there's Google. You want to cook something, just Google it and you'll find out how to prepare it. These are three major factors that are impacting ethnic food."

Q: What advice would you give ethnic food startups?

A: "Anyone developing an ethnic product needs to understand that growth is going to come from the mainstream consumer. If I'm developing a butter chicken sauce, my main target is not the ethnic consumer, it's going to the mainstream. They want variety, convenience, not too spicy, palatable. You need to understand the landscape, the consumer, behaviours, tastes. If you want to grow an ethnic product you're not going to rely on the seven to 10 per cent ethnic population. If I'm going to make a pasta sauce, I can't rely on Italians only because they tend to make their own. My target would be mainstream consumers who don't have time or don't know how to make it. Maybe it's something they eat just once a week. They want something closest to authentic."

Avoid being the next recall

One expensive strawberry In Hong Kong some imported produce from Japan are

causing a stir. Here's one example: strawberries that sell for US\$21 each. Each strawberry is packaged resting on a pink pillow. The supermarket where the pricey fruit is

found was called out by consumers on Facebook, with

shoppers saying the shop needs some public shaming.

The 13th Annual North American Summit on Food Safety is taking place April 26 to 27 in Toronto. Join food safety practitioners at Canada's leading event to gain insight into regulatory changes, mitigate risk in your supply chain, prepare for audits, improve your food safety technologies and build a strong food safety culture. Attend this highly focused food safety summit and benefit from detailed case studies, intimate networking, and interactive learning.

NEWS BRIEFS

> A Statistics Canada survey has found that consumers in B.C. spend more money on food than the average Canadian household, more than every other province except Alberta. The typical B.C. household spent \$9,168 on food in 2015, while the Canadian average was \$8,629. That total was divided into money spent on food purchased in stores (\$6,491) and in restaurants (\$2,677). Albertans topped the list, spending about \$10,171 on food; Nova Scotians spent the least at \$7,478.

> Food and Beverage Ontario has launched its "Taste Your Future" campaign. The contest is open to students in high school or university and invites them to submit an innovative idea for the food and beverage

industry. For more information, visit www.tasteyourfuture.ca/contest.

> Baddeck, N.S.-based Big Spruce Brewing announced that five of its beers will be heading into 473-mL cans this spring: Tim's

The federal government and the province of New Brunswick are contributing \$867,000 to help the Covered Bridge Potato Chip Co. with an 9,000-sq.-ft. expansion. The expansion will help the company improve efficiency, optimize operating space and increase production. The company makes old-fashioned kettle chips with dark russet potatoes harvested from the family company's 200-hectare potato field at Albright Farms, NB.

Dirty American IPA, Kitchen Party Pale Ale, Bitter Get'er India Black IPA, Cereal Killer Oatmeal Stout, and the Silver tart Sour Raspberry Wheat Ale.

> Vankleek, Ont.-based Beau's Brewing Co. has received \$96,500 from the province through the Growing Forward 2 program to put toward its new packaging system. The new packaging system comes as the brewery, which used to assemble boxes by hand, begins distributing its products nationally.



In other news, the company has launched a project to help a female entrepreneur start up a locally owned and operated craft brewery in Rwanda. The Kickstarter campaign raised more than \$100,000.

> The province of New Brunswick is investing \$415,000 to help promote the sale of local food and beverages. The province says the money will go toward implementing the province's Local Food and Beverages Strategy throughout 2017 and 2018.

> Cheese maker Alexis de Portneuf, based in St. Raymond de Portneuf, Que., has unveiled new packaging that it says highlights its traditional heritage. The packaging is also an industry first: it includes an innovative system of taste guides that will

make it easier for consumers to enjoy fine cheese. Each of the company's 46 cheeses will include a taste guide on the packaging indicating the intensity, texture and flavour of the cheese.



> Nestlé's Delissio Rustico Pizza partnered with UberEATS to deliver

free pizza-night kits to consumers on National Pizza Day on Feb. 9. The kit contained one Delissio Rustico Margherita Pizza, one threepack of Haagen-Dazs Salted Caramel Mini Gelato and two Perrier slim cans.

> Jackson-Triggs is the Official Wine Sponsor of the 2017 JUNO Awards. The company says it toasts all the Canadian music artists heading to Ottawa for the 46th annual awards taking place April 2.

> As of Valentine's Day, residents in Toronto can order pints of **Ben & Jerry's** ice cream on demand. The new delivery service will be made available into the summer, and includes three popular flavours: Cherry Garcia, Half Baked and Chocolate Chip Cookie Dough. The company is also introducing two non-dairy flavours.



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NEWS FILE

SUPPLIER NEWS

> France-based Roquette is building a new, \$400-million pea-processing facility near Portage la Prairie in Manitoba. Once open the facility is expected to create approximately 150 jobs, with an estimated annual payroll of around \$9 million. The facility is also expected to benefit the province's economy and Canadian farmers by establishing stronger markets. > Agriculture and Agri-Food Canada is investing \$1.1 million in Delta, B.C.-based Mazza Innovation to expand its plant extract production facility. The company's phytonutrients are used in functional foods and dietary supplements.

> Concord, Ont.-based Aztec Electrical Supply Inc. will now distribute Festo Canada's growing product portfolio. The lineup includes Festo's pneumatic, electrical and process product range.

> HACCPCanada has certified Ampak Plast of Hawkesbury, Ont. for demonstrating its ability to manufacture food-grade plastics and glass containers by maintaining an Active HACCP-Based Food Safety System centred on industry standards which fully meets or exceeds the Food Safety Codes of provincial health regulatory authorities, Health Canada and the World Health Organization.

> Philadelphia, Pa.-based Crown Holdings Inc. is celebrating the 125th anniversary of the bottle cap — also known as the crown cork. The cap was invented in 1892 by William Painter,

who founded Crown Holdings.

PEOPLE ON THE MOVE



> Agriculture and Agri-Food Canada has appointed Lonny McKaque as commissioner of the Canadian Grain Commission. The appointment is for a four-year term effective Feb. 13. 2017.

> Longueuil, Que.-based Agropur Cooperative has announced that its new president is **René Moreau**. Moreau succeeds Serge Riendeau, who is retiring. Moreau is a dairy farmer from Warwick, Que. who has been a member of Agropur's board since 1998.

> D'Arcy Hilgartner is the new chair for the Alberta Pulse Growers. Hilgartner, who served as vice-chair for the last two years, farms near Camrose growing a wide range of crops, including peas, wheat, canola, barley and flax.

> Toronto-based SunOpta Inc. has appointed David J. Colo as its new president and CEO.

> Ardent Mills, a flour-milling and ingredient company, has appointed John Barton as CFO.

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MARKET COMMENTARY: Changing forecasts

It's rather strange to see commodity markets go sideways for so long at this time of year. And stuff coming out of the "bear bag" and the "bull bag" simultaneously are almost laughable and a little unique. This week several forecasters raised their estimates of Brazil's soybean crop (bearish), but some show pictures of water-ruined crops that can't be harvested (bullish).

Various rumours killed much of the U.S. winter wheat crop, twice from cold weather, once from warm. The complete lack of correlation between winter weather and eventual yields displays the fact that the ancient genes of the wheat plant know more than most market analysts. And there are several more months to "kill" crops before they are actually planted.

Similarly, the daily conjecture on how much switching from spring wheat and corn into soybeans will occur in the U.S. is almost mind-numbing. Trudeau's love-in with Trump drove a gaggle of conjecture about how great this was going to be for the Canadian economy and the loonie, followed by sober second thoughts about not trusting Trump, how the new NAFTA negotiations could be bad for Canada, and how Trump's "Buy America" approach would not be good for the Canadian economy or the loonie. My obvious cynicism arises from the sure knowledge that when there are so many mixed messages it means that no one really knows what the heck is going on!

The problem with all this is that the difference between a reduced crop in South America and North America, with reduced export demand and the opposite situation, probably means the difference between \$7 soybeans and \$14 soybeans, with equivalent ranges for corn and wheat. Therefore, risk management is extremely important. I have tried to get my farm clients to price some of their products near the recent highs and buy Calls in case the tops fly off. In reverse, Puts are appropriate for commodity buyers.

Market Trends is prepared by Dr. Larry Martin, who offers a course on managing risk with futures and options in Guelph, Ont. through agrifoodtraining.com. Contact him at DLM@explornet.com or (519) 841-1698.

MARKET HIGHLIGHTS

> Grains: Grain markets are tight-roping between North America's huge 2016 crop, another big one expected in 2017, rising stocks, and a large South American crop, all offset by strong export and, in corn's case, domestic demand. The past month's demand won out as grains rallied before a sell off to current levels. U.S. soy and wheat exports are four million tonnes above last year, while corn is up 10 million tonnes. Managed money funds increased their long positions (or decreased their shorts in wheat), fuelling the rally, but giving opportunity for major downside if bearish factors begin to dominate.

> Corn: May futures penetrated \$3.75 resistance to \$3.87 before falling back to \$3.78. This rally was driven by continued strong exports, record corn use in ethanol, and fund buying. The rally stopped because of increasing production forecasts and weather delays in U.S. shipping giving China a chance to sell some of its stockpile. U.S. exports in the next few weeks will be critical. If you covered the breakout, watch for a move down. If you are not protected, buy dips toward support around \$3.50. > Wheat: May Chicago wheat broke out briefly above resistance at \$4.60 before falling back to the current \$4.55. Continued strong demand as well as forecast major U.S. production decline fuelled the rally. We continue to suggest protecting against \$4.60 and buy around \$4.10.
 > Soy oil: May soy oil is in a downtrend, along with palm. Supplies are rising for both, as Asian palm yields increase and soy crush is strong because of the demand for meal, so the oil needs a home. May is at \$0.328, down from \$0.37 in mid-January. Potential support is at \$0.325 with major support at \$0.305. We would look to price in those areas.

Sugar: May sugar traded narrowly between
 \$0.2115 and \$0.1989 for the first two months of
 2017, and is currently at \$0.2012. Clearly a market looking for fundamental direction, though also looking technically weak. Last month we
 said, "if you bought the last dip, we would sell now and buy again on an adjustment to \$0.20."
 Now add to that "protect above \$0.2115 and look to buy at major support of \$0.177."
 Natural gas: The roller coaster continues with natural gas dropping around a half dollar, with June at \$2.91. This is due to a milder than expected winter. Now signs suggest that the

market is tightening as prices reach fairly strong support. We would consider pricing requirements now or protect at the \$3.05 resistance.

> Crude oil: June crude traded in a channel between \$59.89 and \$55.18 since early December. OPEC's decision to limit production and excellent compliance has held prices, but not got them higher. Increased activity in the U.S. is increasing supply there, offsetting some of the OPEC effect. Iran is suggesting that prices above \$55 are not good for OPEC because they invite competition and conservation. We suggested protecting against \$55+ oil and continue to support that notion. Hold your positions if you bought Calls. Be prepared to lock prices on a break down toward support at \$48 or \$45.

> Canadian dollar: The loonie chopped between U\$0.74 and \$0.77 since October, recently near the top at \$0.763. Talk of another increase in U.S. interest rates and improved U.S. economic performance are positives. Commodity buyers should protect the downside. Hold the \$0.755 June Puts recommended some time ago and/or buy \$0.75s.



The food safety focus of SFCA

Ron Wasik

he long-anticipated official draft of the regulations proposed under the *Safe Foods for Canadians Act* (SFCA) appeared on Jan. 21, 2017. Canada's agri-food sector now has until April 21, 2017 to comment to the Canadian Food Inspection Agency (CFIA) on the proposed regulations. Many sectors of our agri-food supply chain will likely have some concerns, particularly with portions of the regulations that affect their sector. Here are some of my concerns.

Preventative controls

The 2015 "Pre-SFCR-Canada Gazette" draft defined a control measure as "Any action and/or activity that can be used to minimize, control, prevent or eliminate a food safety hazard or reduce it to an acceptable level." This wording is consistent with CODEX. However, the Preventative Controls section of the SFCR-CG1 does not use the words "minimize" and "reduce it (hazard) to an acceptable level." The Glossary of Key Terms (Glossary) accompanying the SFCR-CG1 also defines "critical control point" and "control measure" as measures or steps "to prevent or eliminate any biological, chemical or physical hazard." This is very concerning as it implies that a hazard must be entirely prevented or eliminated. This wording is not consistent with CODEX. Whether by editorial oversight or for some other reason, the Glossary's definitions for "preventative control" and "validation" use terms more in line with CODEX, but this is not reflected in the text of the SFCR-CG1. Clarification is needed.

Investigation & notification, complaints & recall

The SFCR-CG1 states that "The operator must immediately notify the Minister of the results of their investigation (of a food safety hazard) and immediately take action to mitigate any risk..." This action is necessary if the goods in question are no longer in the control of the operator. However, in my opinion, there is no need to notify the Minister "immediately" if the goods in question are still in the control of the operator, and especially if the goods have not left the operator's facility. There is no immediate risk to the public. Notification to the Minister must still take place on a timely basis.

Preventative control plans (PCP)

I don't think I am the only person whose understanding of a PCP is that it encompasses a detailed analysis of food safety hazards, including prerequisite programs, HACCP plans, SOPs, SSOPs and other measures to ensure safe and wholesome foods. However, when the SFCRs are in place, labelling, standards of identity and net-quantity regulations will also need to become part of a firm's PCP for each of their products.

Importers beware

A key part of the SFCA was requiring importers to abide by the same regulations that our domestic agri-food producers and processors must work under. Without exception, all importers will need to be licensed with the CFIA. Canadian importers must ensure that their suppliers are capable of producing goods to the same standards required by Canadian



regulations. This will include ensuring that the foreign supplier has competent individuals to manage the applicable, Canadian-equivalent PCP. I was surprised to learn that importers in Canada are not required to have food safety-trained (competent) staff to assess the PCPs of their foreign suppliers but can use thirdparty consultants. Given that every company (foreign or domestic) has a different format for its PCP, this will be a gold mine for consultants and a nightmare for the CFIA.

When SFCRs come into force importers will be required to provide the CFIA with extensive information about the product being imported "before the import or, in the case of a food other than a meat product, at any other time authorized by the Minister." All importers will also have to "pay the applicable fee set out in the Fees Notice."

Outcomes based

The metrics in the SFCR-CG1 that the CFIA is proposing to use to measure the effectiveness of the Agency and the SFCRs (outcomes) will not reveal how effective the Agency and the SFCR have been on improving food safety. I'll write about this and budgeting in my next column.

To learn more about and to comment on the SFCR-CG1, visit www.inspection. gc.ca/AskCFIA or www.inspection.gc.ca/ StayConnected, or email CFIA-Modernization-ACIA@inspection.gc.ca ●

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Fettering discretion

A cautionary reminder for regulators and their ministers

Ron Doering

f you're in the food business, for reasons of public health, trade and consumer protection, you're always swimming in a sea of regulations. This regulatory environment is characterized by broad delegated bureaucratic discretion: a central feature of Canadian food law is that most of the law is made, interpreted and enforced by officials, not by legislatures and the courts. Sure, legislation goes to legislatures and regulations go to Cabinets for decision, but guidelines, directives, interpretation letters, certifications, pre-market approvals, letters of no objection, waivers, decisions to prosecute, detention orders, product seizures, recalls, import bans, HACCP approvals and withdrawals, import bans, warnings, rulings, and border controls all come from your friendly food regulator, sometimes acting in the name of the minister. These rules are often called soft laws in the sense that they are not formal legislation or regulations. But if you're on the wrong side of a bureaucratic decision, they can feel pretty hard.

So the Canadian Food Inspection Agency (CFIA) and Health Canada have immense discretion, discretion that their thousands of employees exercise every hour of every day. What can you do if they make a decision or take action that was wrong, or arrived at through a process that denied basic procedural fairness such as providing adequate notice or an opportunity to be fully heard? Internal review by CFIA's Appeal Office is now possible, but by its very nature it has significant limitations. What about seeking Judicial Review by the Federal Court? Historically, very few food companies have sought relief from the Federal Court. In addition to the cost and time involved, companies know how hard it has been in the past to get the Federal Court to set aside CFIA actions. The Court has consistently displayed a high degree of deference to the regulators, citing the need to exercise judicial restraint when reviewing decisions involving complex decision-making processes, deep expertise and rules designed for the protection of the public. This is why there is so little jurisprudence in Canadian food law. This could all be changing.

In a recent decision (Apotex Inc. vs Minister of Health, 2015 FC 1161), Mr. Justice Manson quashed an Import Ban on Apotex companies on the basis that the minister had denied the company procedural fairness as she had not provided adequate notice, depriving it of a meaningful opportunity to be fully heard before the ban was imposed. Moreover, the Court held that the minister acted on an improper motive: "The above facts suggest that the Import Ban was motivated by the minister's desire to ease pressure triggered from the media and the House of Commons — a purpose falling outside her delegated authority." The Court provided a blunt conclusion: "The minister implemented an Import Ban that was motivated by an improper purpose, and without affording Apotex the procedural protections required by law. This is neither a reasonable decision nor a correct one — it is an action taken without legal authority and thus must be quashed." Apotex is now



suing the federal government for \$500 million for damages sustained because of the unlawful ban.

It may be that the Court was influenced by the fact that the evidence showed there was no urgent need to protect public health, so the scope of the precedent may prove to be limited to those situations. Nevertheless, litigation lawyers may now be more inclined to seek judicial review. Gowling WLG partner and seasoned litigator Rick Dearden provides a caution to public servants: "Justice Manson's decisions in the Apotex cases are a strong reminder that the rules of natural justice and fairness really matter. Government officials are not above the law and these rulings will embolden persons dealing with bureaucrats to assert their administrative law rights in the Federal Courts. Officials who fail to act fairly do so at their own peril."

Even when ministers and their officials seem to have been accorded near unfettered discretion, their behaviour and decisions cannot deny basic procedural fairness to regulated parties.

Ronald L. Doering, BA, LL.B. MA, LL.D., is a past president of the Canadian Food Inspection Agency. He is counsel in the Ottawa offices of Gowling WLG, and adjunct professor, Food Science, Carleton University. Contact him at Ronald.doering@gowlings.com

REGULATORY AFFAIRS



Driving **Change**

The Safe Food for Canadians Regulations

Gary Gnirss

Good regulatory modernization has been underway in Canada for the past several years. The *Safe Food for Canadians Act* (SFCA) came into being in 2012, and since then a push to create the *Safe Food for Canadians Regulations* (SFCR) began in earnest. Ideas about consolidating federal inspection under one agency eventually lead to the creation of the Canadian Food Inspection Agency (CFIA) in 1997. That early vision aimed at the consolidation of the federal food legislation, something that is happening now.

On Jan. 21, 2017, the SFCR made its appearance as proposed regulations in *Canada Gazette I*. The scope of the SFCR's impact is enormous. It will function as a catalyst bringing into force provisions within the SFCA that will repeal many federal food laws, like the *Meat Inspection Act, Fish Inspection Act* and the *Canada Agricultural Products Act*, and withdraw foods from the *Consumer Packaging and Labelling Act*. The SFCR will also replace the multitude of food regulations under previously mentioned Acts.

Once finalized, the SFCR will redefine the role of the CFIA and industry in managing compliance. A new licensing regime will be established, traceability will be enhanced, and preventative control plans will become mandatory for much of the food industry. The goal is essentially to prevent food safety issues and allow the CFIA to operate more efficiently and strategically toward that goal, by removing obligations placed on it by existing legislation that has little or no significant impact on food safety. The proposed SFCR is not, however, the end game for food regulatory modernization. It includes food labelling requirements that for the most part have simply reconsolidated the labelling requirements in the legislation that will be repealed. Beyond that, the CFIA is looking at making further amendments to Canadian food labelling in the *Food and Drug Regulations* (FDR) as well as the SFCR.

The timeline was set when the starter's pistol was fired on Dec. 14, 2016 with

COnce finalized, the SFCR will redefine the role of the CFIA and industry in managing compliance.

the publication of final regulations in *Canada Gazette II* amending the FDR regarding nutrition, ingredient, allergen and precautionary allergen labelling, and granting a five-year transition period. Food labelling modernization is like a complex jigsaw puzzle that is being taken apart and reassembled. Old worn pieces are being culled, while new ones are being introduced. What we have in front of us are the borders that are defined by the FDR and SFCR. We are beginning to see the shape of the new puzzle with more clarity, and have a sense of timing on how this will unfold.

The various elements of food labelling modernization include amendments to nutrition, ingredient, allergen and precautionary allergen labelling already finalized in December 2016. Health Canada is also looking at front-of-packaging nutrition information related to sugars, sodium and saturated fat. In addition, the CFIA is looking at modernizing date labelling and storage information; how the dealer name and address is to be declared; country of origin labelling; quantitative ingredient labelling in cases where ingredients are highlighted by words or pictures; labelling of represented flavours; ingredient class names; food compositional standards; and enhanced legibility and placement of information.

Working backwards from Dec. 14, 2021, and considering that it is customary to provide at least a two-year transition period for significant label changes, it will be around December 2019 when we have final regulations on all this. That means we are looking at mid-2018 for proposed regulations on the outstanding food labelling modernization elements. The currently proposed SFCR must then be finalized by mid-2018, before any amendments can be proposed thereto. What this demonstrates is that regulatory reforms must move ahead. The timeline also exposes certain milestones that could help industry make a more efficient transition to the changes coming. It is unlikely that early participation in the changes finalized thus far will be efficient. That does not mean that ignoring this or sitting idle is a great strategy either. Have a plan! 🌢

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Is the end of meat near?

Not quite. But the meat industry is starting to diversify to meet changing consumer demand

BY NATALIE CAJIC





ast fall when the largest U.S. meat company, Tyson Foods Inc., bought a five-per-cent stake in Beyond Meat, a California start-up in the plant-based meat alternatives market, one might conclude that mock meat was here to stay. That conclusion would be correct, as more companies race to meet the growing demand for meat substitutes — projected to

reach US\$5.96 billion by 2022, at a compound annual growth rate of 6.6 per cent from 2016, according to research firm Markets and Markets. To meet the changing demand in protein consumption, traditional meat companies are offering their own meat/plant blend as well as plant-based protein products.

According to Statistics Canada, per capita consumption of beef and veal has been showing steady declines. For example, in 2015 Canadians were eating 24.4 kg of beef per person, per year versus 30.3 kg in 2005. However, chicken and turkey have held their own, with chicken consumption jumping from 30.7 kg per capita in 2005 to 31.9 kg in 2015.

Explaining the reason for chicken's popularity, Robin Horel, president and CEO of the Canadian Poultry and Egg Processors Council, says that in Canada, "it's predominately health-driven." But other factors have worked in chicken's favour, including good records on animal health, animal welfare and food safety, its convenience and recipe versatility, and of course, price, he says.

However, does the downswing of beef and veal truly reflect a lower demand? Ron Davidson of the Canadian Meat Council, says beef supply goes up and down based on factors such as weather, disease issues, and the prices producers are getting back. The massive record-setting drought in the southern U.S. three years ago sent beef prices soaring, shrinking herds to the size of what they were in the 1950s. "They are now in the rebuilding phase so in the last couple of years beef consumption has been rising and will rise substantially again this year," says the director of International Trade, Government and Media Relations. In the case of pork, pig farmers in the U.S. saw their herds decimated by a deadly virus, says Davidson. *The Globe and Mail* reported that the virus showed up in Ontario barns in 2016, sending pork and bacon prices in Canada and U.S. up by 60 per cent. Statistics Canada reports pork consumption dropped only 0.5 kg between 2005 and 2015.

While meat and poultry consumption does not look like it will subside any time soon, traditional meat packers are looking at diversification nonetheless. Cardinal Meat Specialists Ltd. found success in the burger category — producing roughly 160 to 170 different burger products — and has done equally well with its non-meat veggie burgers. The veggie burgers, which are made of soy protein, are marketed under the Cardinal Select brand name for retail markets, as well as being sold to foodservice customers.

Maple Leaf Foods Inc. is experimenting with making "meat" made from peas, soy and other crops, but Annemarie Dijkhuis, director of Public Relations at

CHICKEN AND TURKEY HAVE HELD THEIR OWN, WITH CHICKEN CONSUMPTION JUMPING FROM 30.7 KG PER CAPITA IN 2005 TO 31.9 KG IN 2015



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Maple Leaf Foods, says it is still early days. As to why the company decided to look at plant-based proteins, Dijkhuis says consumer trends indicate that protein alternatives are important to customers; and at the end of the day, "we are a protein company." Late last month the company also announced it was buying U.S.-based Lightlife Foods, a manufacturer of plant-based proteins, for US\$140 million.

Mintel's 2017 *Global Food & Drink Trends* points to the inclusion of the "veggie-forward" or "plant-forward" movement, with vegetables sharing more of the plate or blended in recipes. "In 2017, the food and drink industry will welcome more products that emphasise plants as key ingredients," writes Jenny Zegler, global food and drink analyst. "More packaged products and recipes for home cooking will leverage fruits, vegetables, nuts, seeds, grains, botanicals and other plants as a way to align with consumers' nearly omnipresent health and wellness priorities."

An example of plants being blended into traditional recipes are mushrooms, although they are not technically plants, but fungi. U.S. Mushroom Council CEO Bart Minor, quoted in FoodNavigator-USA, says "blended" burgers, meatballs and tacos are gaining significant traction in the U.S. foodservice

market. Not only do mushrooms add texture and bulk but also a "meaty/unami/savoury" flavour that enables manufacturers to cut meat content by 50 per cent, and in some cases, up to 80 per cent, he says. In addition, the benefits of blending include slashing the calorie, saturated fat and cholesterol content.

Future meat processing may soon include a 3D printer. German company Biozoon Food Innovations is a pioneer in producing meat-based products using 3D printing technology. Currently targeting seniors in nursing care with dysphagia, a condition that makes chewing and swallowing difficult, the company combines raw chicken and pork with a plantbased texturizing agent such as algae-derived carrageenan to create new shapes of meat-based dishes that are soft and easy to chew.

Raphaël Moreau, a food analyst with Euromonitor International Ltd., says 3D printed technology cannot yet replicate meat cuts with muscle such as steak. "However, as the research remains in its infancy, it is likely to develop rapidly, with companies and laboratories working on making products available at restaurants or on the shelves early in the next decade," he says.

The next frontier of meat production very well may not be on farms at all, but in laboratories. Not only is "in-vitro" or "cultured meat" possible, but products may become available for purchase within five years, according to a press release from Memphis Meats, a San Francisco-based start-up. The company unveiled its first product in 2016: a meatball that cooks, smells, and tastes like the real thing. Says Memphis Meats CEO Uma Valeti, M.D., in the press release, "we plan to do to animal agriculture what the car did to the horse and buggy. Cultured meat will completely replace the status quo and make raising animals to eat them simply unthinkable." Other companies in the race to commercialize "clean meat" products include Mosa Meat, which is working with the Dutch team behind the prototype lab-grown cultured meat burger (produced from stem cells) that was cooked and eaten in London in 2013.

Despite the growing demand for meat substitutes, the Canadian Meat Council's Ron Davidson says meat consumption in Canada will continue into the future. Declines in beef consumption are not indicative of consumer perception. "It is not demand driven," he says. "There are a lot of factors at play here."

Aquatic superfood

Phytoplankton is no longer just for sea creatures, as humans across North America are increasingly looking to the microalgae for its nutritional benefits

Carol Neshevich



avid Hunter didn't have high expectations when he first agreed to try phytoplankton. In fact, he was rather skeptical that it would have any impact on him at all. But he gave it a try anyway — and was very surprised to find that the microalgae seemed to have a hugely positive impact on his health.

"My migraines were eliminated, my hay fever and chronic runny nose disappeared, and my chronic fatigue that I had since I was a teenager went away," says Hunter, president and CEO of New Brunswick-based Blugenics Innovations. Blugenics distributes a product called Karen Phytoplankton, because, as Hunter says, "I wanted to share this with as many people as possible."

What is phytoplankton?

Found in the ocean and other bodies of water, phytoplankton are microscopic organisms that are also known as microalgae. As Hunter notes, "it's considered the world's original vegetable." In the underwater ecosystem, phytoplankton are a vital food source for a wide range of sea creatures, including whales, shrimp, snails and jellyfish.

And in recent years it's become

increasingly popular among humans too, primarily as a nutritional supplement, but with other food products on the horizon. "We sold more than 48,000 units in 2016," says Hunter. "We have many pharmacies and health food stores tell us it's their number-one selling product in the entire store, and most of it is driven from word of mouth."

What are the nutritional benefits?

Phytoplankton is jam-packed with omega fatty acids, vitamins A, C, D and K, beta carotene, dietary fibre, antioxidants, calcium, magnesium, selenium, iron and protein. Health and wellness bloggers all over the internet are touting its benefits wherever you look — in January, for example, the blog Wellness Mama dedicated an entire lengthy post to singing the praises of phytoplankton.

"This specialized phytoplankton is probably the most foul-tasting thing I've ever consumed, yet I've been taking it for months and don't plan to ever stop," wrote the blogger, before detailing all the nutritional reasons to consume phytoplankton, despite a less-than-appealing taste. Even the Karen Phytoplankton website acknowledges that the taste isn't for everyone, noting, "We recognize we are not going to win any taste awards. Phytoplankton has a fishy taste because it comes from the ocean. You might find that after a month you will not find it as bad, as your taste buds adjust. To mask the taste, you can mix Karen Marine Phytoplankton with apple sauce, V8 juice, tomato juice, apple juice, or pineapple juice."

And while specific health claims are mainly anecdotal, phytoplankton has been credited with helping a wide variety of ailments, from digestive issues, inflammation, fibromyalgia and migraines to chronic pain, low energy and skin issues such as psoriasis and eczema.

How are people consuming it?

Right now, people are primarily consuming phytoplankton as a supplement, whether in powder form, drops, capsules or tablets. Many put it on par with a multivitamin they might take daily. That said, numerous North Americans are starting to add the "superfood" to various food and drinks to give their meals a nutritional boost, particularly when it's in powder form. "If people purchase the pure powder, it can be mixed with water or any juice," says Hunter, adding, "Pineapple juice is a customer favourite."

And like any "superfood" hitting the market today, we're likely to see an increase in commercial food products using phytoplankton as an ingredient. In fact, Blugenics is already developing a food line. "We have plans for a complementary food line called "Greenfilled By Karen" that is set to launch in 2018 in a major grocery chain," says Hunter. "Our starting products are going to be a cereal, a protein powder and a cereal bar." ●



Hamming it up

Daniel Scholes

espite many health experts steering us away from processed meat, grocery stores still offer a wide assortment of choices. Turkey is the latest darling of deli meats, while high-end Charcuterie such as prosciutto, pâté, and other European cured meats are having a renaissance in the deli section. However, our long-standing favourites of bologna, roast beef, and ham continue to own the podium in the deli counter. Sandwiches are still the number-one food option for lunches at home, and are often filled with the same familiar cold cuts we grew up with.

The processing of deli ham is quite complex — baked or smoked hams are generally injected with salt, water and phosphates and are given a variety of labels such as honey, smoked, maple, or Black Forest, to indicate the particular flavouring that has been injected. Black Forest ham acquired its name from the Black Forest region in Southwest Germany, still the epicentre of authentic Black Forest ham production. It's a profile we've come to know and love, and continues to be a lunchtime favourite. So we recently set out to explore four brands of packaged Black Forest ham to see how they stack up.

The pig out

We recruited 50 females between the ages of 25 and 54 from the Greater Toronto Area who are the primary grocery shopper in the household and who are regular consumers of packaged sliced ham. They tasted and evaluated four brands of packaged Black Forest ham. They were asked a series of detailed hedonic and "just about right" questions regarding the appearance, flavour and textural profiles of the ham.

Nice slice...twice

Two brands of Black Forest ham took the top prize in our contest. They both had excellent results and achieved all performance action standards for the category. While these two ham slices shared similar profiles and there were no significant differences between them, one was directionally better as a result of its slightly smokier and less salty flavour profile. In fact, this winner boasted top box purchase interest of over 40 per cent — which is definitely one high achieving ham. In addition to their winning flavour profiles, these hams outperformed their competitors for their textural profiles as well — another strong driver of "liking" in this category. These slices were thicker, firmer, with the right amount of moistness compared to their less formidable competitors.

The two brands of ham at the other end of the performance spectrum were similar for some of their unappealing qualities, such as extreme saltiness. These slices also tended to be too thin and "wilty." But when it came to the flavour profile, one was disliked for having a very strong smoky flavour, while the other had little detection of smokiness at all. And texturally, one was much too dry, while the other tended to be too wet. So both these two packaged hams seemed to miss the mark on their sensory profiles... although not for all the same reasons.

Trees in the forest

Among our participants, the top stated features driving their purchase decisions

for packaged Black Forest ham were "no preservatives," "natural ingredients," and the "expiry date." It may seem counterintuitive that consumers actually look for packaged foods that last the longest, but also want them to be free of any ingredients that actually help to achieve this goal. The message may be conflicting, but at least it's clear to food marketers and manufacturers — consumers want to be told what they're eating is good for them, but they also want all the convenience and good value that is sometimes at odds with the first objective. Packaged, processed food is both our friend and our foe.

The Black Forest ham brands in our test were all reasonably similar in meat protein, ingredients, and nutritional labelling. Some called out claims of gluten and lactose free, while others focused on being a good source of protein or trans fat free. Consumers respond to these reassurances and positive messaging, but they are also looking to satisfy their needs for convenience, value, and over everything else, tastes they enjoy and are familiar with. Our test revealed two brands that achieved high standards in product performance, and two that did not. Standing apart in the crowded forest of packaged foods means providing the best possible sensory experience, one which consumers will return to. 单

For questions about this research, or how you can leverage consumer taste buds in your business, contact Dan Scholes at info@contracttesting.com or (905) 456-0783.

BUGGNG

Swarms of edible insects are heading to Canadian grocery shelves

BY JONATHAN HILTZ

here are many reasons that over seven billion people on the same rock can be challenging. One problem is how to feed everybody while at the same time trying to sustain the environment.

Most of us are omnivores and eat everything including plants,

mammals and fish, but we have ignored one of the largest food sources available — insects. The "ick" factor aside, the process of entomophagy (people eating insects) has been going on as long as humans have been alive. In fact, we can almost guarantee that our early ancestors dined regularly on creepy crawlies. Even in recorded history, Romans and Greeks ate beetle larvae and locusts, and Aristotle wrote about harvesting cicadas to eat as well.

In 2014, the Food and Agriculture Organization of the United Nations held the first "Insects To Feed The World Conference" in order to promote the global consumption of bugs. Since that time insect farming has increased, and a host of new products made from these tiny protein soldiers has reached store shelves.

Ontario-based Entomo Farms is one of the largest

insect producers in the Western Hemisphere. Some of its many products include four kinds of protein powder made from crickets and mealworms, as well as bags of roasted ones for snacking. "There's just not enough arid land to grow the grains to feed the cow," says Dr. Jarrod Goldin, president of Entomo Farms, talking about the impact of meat production. "It's just so environmentally devastating."

Goldin adds that it's not just humans who are beginning to enjoy the oldest new food on the planet, the pet food sector for insects is hopping as well. "One of the most successful companies is in Quebec, called Hexa Foods. They just got a sizeable investment and their brand is stunning."

Indeed, Hexa Foods was just given a \$315,000 boost by Angus Quebec. The company is using the investment to launch its new Wilder & Harrier brands of pet food, made from crickets. Like Entomo, Hexa prides itself on having a supremely positive effect on the environment. In a press release on its recent investment, Hexa pointed out that "replacing an 80-g bag of dog treats made with beef, with a bag of their 'BugBites' brand dog treats, saves over 100 L of water."

Entomo Farms has also been approached by large pet food manufacturers regarding insect protein in their products, so clearly there is room for growth. "Probably the largest pet food manufacturer in the U.S. has come up to our farm twice, and is almost finished on a brand that they will be launching as a dog treat and kibble." Goldin says that in the edible insect realm, mostly crickets and mealworms are being used



As more people realize the economic and nutritional benefits of insects as a food and feed, increased investments in infrastructure, research and development will spur continued growth.

for consumption, but that will certainly expand. "There's thousands that are edible. We also farm hornworms, superworms and waxworms." Because crickets are seemingly the most popular for human consumption, they've affectionately been called the "gateway bug."

Another sector that is getting popular for insect breeding is feed for livestock, and they eat an entirely different bug than us humans. "On the livestock feed side, the black soldier fly larvae is attractive for certain species," says Goldin.

Insect farming is becoming so popular that The North American Edible Insect Coalition (NAEIC) was just founded, with Goldin nominated to be the organization's co-director, Food, and Amanda Bushell as co-director, Feed. "While our official mission statement is still being refined, I believe the NAEIC will be a driving force in creating an insects as food and feed industry that is safe, responsible and transparent," says Robert Allen, Food Outreach Administrator for the newly formed organization. Allen went on to add his predictions for the growing industry. "As more people realize the economic and nutritional benefits of insects as a food and feed, increased

OR N Ti m for enjo

ON THE MENU There have been many tasty recipes

for insects to be enjoyed. They include grasshopper bacon bits

that are used as toppings on various dishes, deep fried tarantula and dragonflies, cricket fried rice, mealworm tacos and many more.

Insects are also now being used to fight hunger and malnutrition in various parts of the world. In 2015, three recent graduates from California State University, Chico started a social enterprise in Guatemala. Their goal is to "promote better nutrition through sustainable farming of protein-rich mealworms." Essentially they teach local communities how to farm insects and include them in their diet as a source of protein.



investments in infrastructure, research and development will spur continued growth and interest from both established industry giants and the burgeoning entrepreneurial sector."

So now that we know that people are making insects into everyday food, what major chains are willing to stock them? Well, for one, Canada's largest supermarket retailer.

On Dec. 2, 2016, Loblaw Companies sent out a press release announcing food trends it was considering for 2017. In it, the company stated that "Canadians will be bugging out as they increase consumption of alternative proteins such as insects and plant-based proteins." According to Jennifer Lambert, senior manager of Sustainability at Loblaw, first and foremost, "Canadians are more interested than ever about where their food comes from and the effect food has on the world around us." Lambert adds that Canadian consumers are "choosing a wider range of alternative proteins, such as pulses or even insects!" But will we see roasted crickets in the snacking isle? "There are many countries in the world where eating insects is quite common," says Lambert. "Although the immediate future of insect consumption in Canada is likely focused on using them as feed for livestock, we are seeing consumer products, such as cricket flour, becoming more ream."

mainstream."

The Smithsonian Institute predicts that for every human on the planet there are 200 million insects. That means, even though it may take a little while for people in the Western world to get used to ingesting bugs, when they finally do, there will be plenty for everyone to eat. \blacklozenge



SPECIAL REPORT



THE ROAD FORWARD

The way food and beverages are shipped continues to change. In Part I of this special report, *Food in Canada* looks at how food safety has influenced logistics in the industry **By Carolyn Gruske**

> nticipating what's going to happen is one of the daily challenges for any logistician — will a load arrive in time or will weather hamper delivery? — but contemplating the future of logistics in the food and beverage industry

means considering everything from changing government regulations to new automated technologies, to improved training programs.

One such change that the entire industry is facing is the adoption of new food safety rules that have been proposed by the Canadian Food Inspection Agency (CFIA). The *Safe Food for Canadians Regulations*, which were published in January, are undergoing a period of public commentary and consultation which will last until April 21. If adopted by parliament, the regulations would require companies that produce, store, handle, transport, import or export food to implement preventive food safety controls, which the government describes as a "written document that demonstrates how hazards and risks to food are identified and controlled. The controls are based on internationally recognized good manufacturing practices and Hazard Analysis Critical Control Point (HACCP) principles." They will also require traceability capabilities.

While most large producers, 3PLs, warehouses and transportation companies already have the ability to meet or exceed these requirements, many smaller organizations may find the regulations challenging to implement. According to Tammy Switucha, director, Domestic Food Safety Planning and Requirements, CFIA, the agency has taken the concerns of those types of businesses into account.

"The proposed regulations provide a considerable amount of time for certain types of businesses such as small and micro-size businesses to comply with the regulations," says Switucha. "Those that are currently federally regulated under the CFIA would be required to have the requirements in place upon coming into force. Others are being given up to three years to comply depending on the size of business and depending on what foods they are producing."

She adds that the CFIA is running seminars and webinars to offer businesses information about how they can learn about the regulations and update their business practices to meet the proposed rules. (For a list of events, see:



ohotos: Thinkstock

http://inspection.sondages-surveys.ca/surveys/CFIA-ACIA/proposed-sfcr-info-session/?l=en).

A year ago, the CFIA and the USFDA signed the Food Safety Systems Recognition Arrangement, which in part allows for "enhanced regulatory co-operation, improved co-ordination" and "verification activities" between the two agencies. Switucha says traceability is one of those areas where the two agencies are working to find more common ground. "We are currently working with the USFDA to determine what that would look like," she says. "We've been working quite extensively with them over the past year to be able to scope out how the arrangement will work and what kind of information we'll be sharing with each other to ensure that we respect the terms of the arrangement."

While the two agencies may have common goals, Keith Warriner, professor of food safety in the Department of Food Science at the University of Guelph, says the two countries have a very different style when it comes to regulating the food industry. He says the FDA's Food Safety Modernization Act (FSMA), which has been rolled out in pieces over the past few years (and still isn't fully implemented), is very prescriptive in nature. In contrast, he notes, Canadian regulations, which use a risk-based approach, are more descriptive and in keeping with the nature of the Global Food Safety Initiative (GFSI). "There is a discord there. The confusing part is how to become FSMA compliant. It's a pickle trying to dig into it," he says. Still, Warriner expects Canadian regulations to eventually echo the FSMA's Sanitary Transportation of Human and Animal Food rules, which were finalized in 2016.

While it may be challenging to meet an assortment of different standards, the idea of having them is a good one, says John Halleran, director of Quality Assurance for Etobicoke, Ont.-based logistics provider Thomson Terminals Limited. "With these common standards everybody is working from the same playbook, everybody is working from the same system. Everybody is trying to achieve the same result," he says.

By working toward a common goal, Halleran says it's easier for food producers to work with service providers to achieve results. This is especially important for traceability when communicating across different technologies using different data sets. Having common goals also means it's easier to train people in the food handling techniques that not only promote food safety, but efficiency and good business practices.

"Where businesses are putting their efforts and focus is the management of the people. The challenge is to get your people trained in what to do, and get them trained in the right things," explains Halleran. "You have to have people with application skills to be able to identify what's important. It's not so much that people need to be trained in HACCP or the different systems. You have to be able to articulate to them what they're supposed to do, how they're supposed to do it and how to record it."

In addition to teaching drivers and warehouse workers safe food handling techniques, logistics companies are recalibrating the way they offer services. Doug Harrison, president and CEO of Richmond, B.C.-based VersaCold Logistics Services, says the company has found it necessary to revisit its own processes and procedures. "We're spending more time on advanced planning, using advanced technology to be able to plan routings, and monitor weather fronts. More than 90 per cent of our long haul operations are done by team drivers, so they're avoiding terminals and moving product across the network more quickly. We're advance-booking appointments, to be able to get product into local DCs or retail DCs without undue delays."

Part of the need for quicker deliveries is that the shelf life of products is becoming more important. Harrison says more food companies are producing fresh or time-sensitive products that require tighter delivery schedules and strict temperature controls during transportation over ever-increasing distances. "There's more and more globalization of the food chain. We're seeing it in our transportation management group where we do ocean and air freight, we're getting more inquiries from Canadian manufacturers looking to sell product outside of North America. As transportation supply chains have evolved, there is the ability to move further into the world with efficient supply chains that allow a company to be competitive in the local markets. The challenge is, depending on the product, maintaining the freshness level."

Part II of our look at logistics and the food and beverage industry will appear in the July/August 2017 issue of Food in Canada.

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The carton's role in the story of **recycling**

Isabelle Faucher

e've seen a growing trend among consumers supporting products and rewarding brands that embrace sustainability. For example, the 2015 *Nielsen Global Corporate Sustainability Report* revealed that 66 per cent of respondents say they are willing to pay more for sustainable goods, up from 55 per cent the year prior (and 50 per cent in 2013). The survey also revealed that commitment to the environment has the power to actually sway product purchase for close to half of consumers surveyed (45 per cent).

Enter the food and beverage carton story. Cartons are designed to protect the food inside them, with low impact on the environment. They are made mainly from paper — a renewable resource are lightweight and compact, and have a low carbon footprint throughout their lifecycle. And cartons are recyclable into paper products and even environmentally friendly building materials.

The Carton Council of Canada (CCC) is an industry organization formed by the leading carton manufacturers with the goal to increase carton recycling in Canada. We work with stakeholders across all stages of the recycling value chain to grow recycling of food and beverage cartons, from end markets and sorting facilities to municipalities and consumers. There has been a significant increase in the carton recycling rate in Canada, but we believe there is still room for improvement. As of January 2017, the national carton recycling rate was 57 per cent, up from 26 per cent when we started tracking in 2008. Since

approximately 95 per cent of households have access to recycling cartons in their communities, our efforts focus on other areas such as increasing consumer awareness and participation.

Increasing participation

To better understand consumer attitudes and behaviour towards carton recycling, we conducted a consumer market research survey targeting residents in Ontario and Quebec. The survey results suggest that people believe in recycling,



and act on their beliefs. However, lack of knowledge and awareness is the main barrier to regular carton recycling. According to the results, 62 per cent of those who do not recycle cartons regularly said that access to information enabling them to easily identify what is or isn't recyclable would encourage them to recycle more. Thirty-nine per cent said that better understanding the benefits of carton recycling would motivate them.

With the results of the survey in mind, we continue to work with those that can help us influence consumer behaviour. Product packaging, municipal government websites, and Google searches are the top three sources respondents turn to for learning about the recyclability of food and beverage cartons. So, ensuring recycling information is available where consumers look for it is paramount for further growth in carton recycling and will continue to guide our efforts. Additionally, we partner with stewardship agencies and municipalities to promote carton recycling, leveraging their credibility and already-established channels and programs that reach consumers.

A look at the U.S.

Increasing carton recycling is not just a Canadian goal. For the last eight years, we have placed a significant emphasis on increasing household access to carton recycling in the U.S., knowing that access is the cornerstone of growing recycling. Since 2009, access to carton recycling has increased by 233 per cent, and today more than 70 million American households (60 per cent) are able to recycle their cartons. Moving forward, we will continue to expand access, as well as increase consumer participation and ensure sustainable carton recycling.

Looking ahead

It is clear that in both countries, recycling matters to consumers, but education and promotion remains critical to drive participation. From the companies and brands that sell products, to the municipalities and stewardship agencies that educate consumers about recycling, we all have a role to play in the story of recycling.

Isabelle Faucher is managing director of the Carton Council of Canada (CCC). Contact her at ifaucher@recyclecartons.ca.



Unpacking **cybersecurity issues** in the food and beverage sector



By Christopher Petch

ith digitization and systems integration becoming commonplace in the industry, cybersecurity is a threat that Canadian food and beverage companies must understand and address. From data theft to product tampering and operational disruptions, companies need to understand the full breadth of cybersecurity risks and take action to protect their data, products and operational processes.

The evolving cybersecurity threat

When food and beverage companies address cybersecurity, they typically focus on protecting systems containing sensitive data. But what many don't understand is that professional hackers know indirect ways to breach secure systems — for example, by conducting targeted phishing scams aimed at senior executives. Many headline-grabbing cybersecurity incidents were a result of hackers infiltrating the systems of third party contractors or suppliers, such as point-of-sale software providers, and then accessing the high-profile "end goal" company through system linkages.

And some hackers today aren't after sensitive information at all. Cyber-activists who may disagree with a company's product might use hacking to attack a company's reputation, disrupt its operations or maliciously modify automated processes. Such cyber-terrorism can be extremely damaging in the food and beverage industry, where tampering can increase food safety risks exponentially.

Whether cybersecurity breaches are focused on data or operations, they

can lead to serious consequences for a company, such as severe legal or regulatory ramifications, particularly if human health has been jeopardized.

A holistic approach to managing cybersecurity

To protect against major cybersecurity threats, food and beverage companies should think holistically about cybersecurity rather than focusing solely on individual systems with high-value data. As a starting point, companies should consider the following key activities.

Design a risk-based cybersecurity strategy that's aligned with business objectives and that prioritizes the protection of your most important information and operational assets. After all, cybersecurity doesn't just apply to IT and other head office software — it also includes the technology and data that run manufacturing, processing and other operational equipment. Companies should regularly review and update this cybersecurity "defence in depth" strategy to account for new and evolving risks.

Develop and implement the appropriate cybersecurity infrastructure to protect your organization. You'll need to work with software vendors and service providers to make sure your environment is protected, monitored and ready to respond to breaches. Keep in mind that if you have network connections with your supply chain, they're also a potential point of entry by hackers to your organization.

Understand potential exposure by engaging "white hat" cybersecurity consultants to hack your organization. The resulting analysis can be very effective for getting board members and executives to understand the extent of cybersecurity risks, while also identifying cybersecurity issues that should be addressed.

Develop an incident response plan that identifies exactly how — and when your organization will respond to an issue. This plan should include key roles and responsibilities, stakeholder engagement and how to address regulatory or safety concerns. It should also identify the point at which an incident turns into a crisis. Organizations usually want to inform their customers of an incident before they see it in the media.

Consider purchasing cybersecurityspecific insurance to protect against the ramifications of any major breaches.

Be prepared, be ready

Managing cybersecurity is about more than protecting your company's most valuable data. It's also about protecting business operations from being disrupted by a cyber attack. By understanding the risks and developing a strong cybersecurity strategy, food and beverage companies can better protect themselves and be ready for any cybersecurity issues they might face.

Christopher Petch is a director in PwC's Cybersecurity and Privacy practice. Contact him at christopher.petch@pwc.com. To learn more about negotiating the cybersecurity and privacy landscape, visit www.pwc.com/gsiss for the results of PwC's Global State of Information Security Survey.



The potential revolutionary impact of environmental responsibility mandates

Peter Henderson

anadian agri-food and beverage business leaders can profit by planning for a "potential revolutionary" impact of future corporate environmental responsibility mandates.

While virtually all grocery retailers and distributors have understandably been rather tepid in their environment mandates, including greenhouse gas reduction and overall planet health, this may soon change. In December 2016, Rob Walton made an audacious greenhouse gas emissions reduction announcement via a CNBC article: "Walmart plans to work with thousands of partners throughout the supply chain with the goal of reducing emissions an

additional one gigaton by 2030. That's the equivalent of the total emissions of all passenger vehicles in the U.S. over a year."

Is this a foreshadowing? Perhaps yes, especially if the visible impacts of climate change worsen. Is it possible we will see a more rapid adoption of rigorous mandates, and related procurement standards? At a minimum all suppliers to Walmart will put pressure on their supply chain to meet their goals as a supplier to the company. We may see industry consolidation and divestitures as a result.

Could we see greenhouse gas footprint indicators on some packaging, or made available online? If this is a method Walmart must use to achieve its emissions reduction goal, then it's certainly within the realm of possibility.

Could we see government more active



Research has proven that businesses that adopt life-cycle assessments command higher margins than their peers.

in setting guiding policies regarding carbon and environmental impact? This is difficult to say; however, with the food supply chain being responsible for around 30 per cent of total global greenhouse gas emissions, according to some reports, it too is within the realm of possibility. At least from an education standpoint, consumers may well be steered toward lower carbon diets, whether this is a direct or indirect mandate of governments.

Closer to home, in February this year, food retailer Metro published what could be a foretelling Responsible Procurement Framework. Under Vision: "Metro views responsible procurement from the life cycle perspective — a comprehensive approach that takes into account all of the steps leading to the sale of the product in stores. When Metro purchases a product, it considers every issue pertaining to the product's environmental, economic and social aspects, from the field to the consumers."

Will Metro's corporate responsibility plan in the 2020s be more rigorous around life cycle assessments, and could other North American buyers follow suit? While it is unlikely the "potential significant" impacts will occur until the 2020s, agri-food industry leaders are imbedding life cycle analyses as key components of their decision making process, and putting related systems in place (together with their suppliers) to measure and monitor footprint data throughout their supply chain, while enhancing margin and total profitability. Research has proven that businesses that adopt life-cycle assessments command higher margins than their peers, often with products that are priced competitively or lower.

Finally, leadership teams are making investment decisions based on environmental and social footprints, while anticipating the potential future supply chain landscape and eco-system.

Happy planning and investing for a positive future! •

Peter Henderson is a director on the board of the Agri-Food Management Institute (AMI). He is also founder and managing director of Ideovation, a Toronto-based growth strategy services company. Contact him at phenderson@ideovation.com

MARS 2017 ACCENT ALIMENTAIRE sur le Québec

NOUVELLES



Agropur acquiert une coopérative laitière en Nouvelle-Écosse

Agropur coopérative prend encore de l'expansion. La plus importante coopérative laitière au Canada a récemment fait l'acquisition des actifs de Scotsburn Cooperative Services Limited, une entreprise laitière située à Truro en Nouvelle-Écosse. Les conditions de l'entente n'ont pas été divulguées. Néanmoins, les activités acquises représentent des ventes annuelles totales de plus de 150 millions de dollars.

Pour Agropur, cette acquisition vient bonifier sa présence sur le marché de la crème glacée et des friandises glacées. Scotsburn fabrique de la crème glacée, des friandises glacées et des desserts surgelés. Elle possède une gamme de produits maison et fabrique des produits de marque privée. L'entente porte sur les usines de Truro, Nouvelle-Écosse et de Lachute, Québec qui fabriquent plus de 50 millions de litres de produits laitiers congelés par année. Agropur affirme qu'elle va protéger tous les emplois locaux et maintenir la production laitière des produits surgelés de Scotsburn.

Comme autre nouvelle, Agropur a tenu son assemblée générale annuelle en février où elle a déclaré des ventes avoisinant les six milliards de dollars en 2016 et un bénéfice d'exploitation en hausse de 34,6 pour cent.

BIENS DE CONSOMMATION

> La Maison Maille a lancé un nouveau produit — une cinquième addition à sa famille de cornichons Maille — qui se dit parfait pour le palais des Canadiens: les cornichons au piment fort de Cayenne. La Maison Maille lance ce produit au Canada en mars, avant de



le distribuer dans le monde entier. Ces piments de Cayenne, évalués à 308 sur l'échelle gustative de Scoville, viennent satisfaire le goût croissant des consommateurs pour des mets épicés et relevés. La compagnie mentionne qu'ils peuvent être appréciés avec de la viande grillée, ajoutés aux sauces ou à tout plat pour le rehausser. Ils peuvent également être ajoutés à des cocktails en garniture, mélangés avec des légumes frais ou ajoutés à des présentations de fromages ou de charcuteries. Les cornichons Maille extrapiquants seront offerts dans les supermarchés au prix de 6,49 \$. www.maille.ca



> Rehaussez vos prochaines grillades en y ajoutant la Marinade BBQ à la coréenne McCormick. Cette marinade — qui se marie parfaitement au boeuf, au porc et au poulet — renferme un mélange sucré/salé d'ail rôti, de graines de sésame et de sauce soja. Elle rehausse la saveur du barbecue (d'une touche relevée) ou de n'importe quel plat. Son mélange savoureux fait également bon ménage avec les côtes de boeuf. Offert dans un emballage pratique à usage unique,

ce produit est assaisonné des épices McCormick et ne contient aucun sirop de maïs à haute teneur en fructose. **www.mccormick.com**

Défi laitier

Le Quartier de l'innovation de Montréal, Ag-Bio Centre, NineSigma et Agropur coopérative ont récemment annoncé que trois propositions ont été retenues à l'issue de la première étape de l'Inno Challenge "Ensemble, réinventons les produits laitiers!"



Les participants sélectionnés sont les entrepreneurs Marc Purcell et Nathalie Miller; Martin Macouzet, un inventeur qui raffine depuis des années un concept de produit laitier; et l'Institut de technologie des emballages et du génie alimentaire (ITEGA), qui s'est allié à l'agence de communication LG2 pour développer un projet qui fait le pont entre la recherche, les besoins des consommateurs et ceux de l'industrie laitière.

Les créateurs retenus travailleront en collaboration avec les équipes d'experts d'Agropur pendant 16 semaines, afin de codévelopper les concepts sélectionnés et les amener au stade de prototypes. C'est ensuite les 31 mai et 1 juin prochains qu'ils dévoileront leurs prototypes dans le cadre d'une séance de dégustations qui se déroulera pendant l'Inno Expo d'Agropur.

Le Challenge a pour objectif de découvrir des innovations permettant d'élargir, de développer de façon durable et de renouveler l'utilisation des produits laitiers. Les projets retenus recevront des fonds allant jusqu'à 25,000 \$ chacun.

Les fermes laitières remportent les honneurs



(G – D) Serge Riendeau, président d'Agropur, accompagné de Marie-Josée Turcotte et Régis Lepage de la Ferme Jolipré Holstein.

Seize nouveaux champions régionaux ont reçu les grands honneurs à l'occasion du 28e Gala du Club de l'Excellence d'Agropur.

Cet événement a rendu hommage aux fermes laitières, membres d'Agropur, ayant enregistré les meilleurs résultats en matière de qualité. La Ferme Jolipré Holstein

de Saint-Moïse, a obtenu le meilleur résultat combiné au niveau de la qualité du lait et de l'inspection sanitaire de la laiterie. Propriété de Marie-Josée Turcotte et Régis Lepage, elle possède un troupeau de 80 bêtes de race Holstein, dont 45 vaches en lactation générant une production moyenne de 10,508 kg de lait par animal. Une mention d'honneur a également été décernée à Braefield Farm de Penobsquis au Nouveau-Brunswick. Ces nouveaux champions – sélectionnés parmi tous les membres au Québec, en Ontario, au Nouveau-Brunswick, en Nouvelle-Écosse et à Terre-Neuve-et-Labrador – ont été intronisés au Club de l'Excellence d'Agropur. Depuis sa création en 1988, le Club a accueilli plus de 2,000 lauréats.

Agro-100 à la recherche de nouveaux marchés



L'entreprise de Joliette Agro-100 ltée a récemment fait savoir qu'elle entendait prendre de l'expansion aux États-Unis, dans l'est et l'ouest du Canada, ainsi qu'à l'échelle internationale.

Agro-100 est une entreprise agroalimentaire spécialisée dans la recherche,

la fabrication et la commercialisation de produits agricoles de haute technologie qui tire profit de la récupération des matières fertilisantes résiduelles.

La compagnie a créé une nouvelle filiale mondiale pour cibler



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ces nouveaux marchés, et elle a nommé Lorne Bienstock au poste de vice-président principal des ventes mondiales.

d'entreprise.

Groupe Nutri peaufine la

Le Groupe Nutri de Saint-Hyacinthe

a créé un comité d'audit qui appuiera

ses nouvelles pratiques de gouvernance

Le comité est composé des membres

du conseil d'administration, Claudia

François Allie, administrateur, ainsi

que d'un membre externe, Claude

Lafleur, un ancien chef de la direction

Désilets, vice-présidente et Jean-

qualité de son audit





de La Coop fédérée. Le comité d'audit soutiendra le conseil d'administration du Groupe Nutri dans ses activités de gouvernance et contribuera à améliorer la qualité de l'audit. Il sera responsable de surveiller l'information financière. s'assurant du respect des règles de

gouvernance et de déontologie. Il

effectuera également de la veille en matière de gestion et de prévention des risques.

Groupe Nutri exploite des usines à travers le Canada, lui permettant de transiger annuellement plus de 1,7 milliard d'œufs ordinaires et de spécialités ainsi que d'œufs transformés.

Les producteurs et les acheteurs de sirop d'érable concluent une entente pour 2017

La Fédération des producteurs acéricoles du Québec (représentant les acériculteurs) et le Conseil de l'industrie de l'érable (représentant les acheteurs de sirop d'érable) ont conclu une entente encadrant la vente et la mise en marché du sirop d'érable en vrac pour les saisons de commercialisation 2017 et 2018.

Aux dires des deux parties, quelques séances de négociation furent nécessaires pour ratifier les conditions de la convention. La Régie des marchés agricoles et alimentaires du Québec (RMAAQ) n'aura donc pas à arbitrer la Convention en 2017. Les deux groupes ont soumis l'entente à la RMAAQ pour approbation. 🥕

BRIDOR INVESTIT 40 M\$ DANS L'EXPANSION



Bridor, un chef de file nord-américain dans le secteur du pain et des viennoiseries, vient d'investir 40 millions \$ pour doubler la superficie de son usine de Boucherville. Cet agrandissement permettra à

Bridor d'augmenter sa capacité de production de 80 pour cent et de générer une croissance de l'emploi dans la région. La compagnie estime créer près de 60 nouveaux emplois, dont plusieurs seront des postes d'opérateurs de production industrielle, responsables de chaînes de production à la fine pointe de la technologie.

Bridor propose plus de 300 recettes artisanales de pains français croustillants et 150 recettes de pâtisseries. La boulangeriefournit de gros distributeurs ainsi que des chaînes d'épiceries, de restaurants et d'hôtels au Canada et aux États-Unis. L'entreprise, qui exploite son propre centre de R et D, compte plus de 700 employés dans ses quatre usines nord-américaines, dont 500 travaillent au Canada.



ACCENT ALIMENTAIRE

Selon l'entente finale, les prix du sirop d'érable demeureront les mêmes. Toutefois, le classement se fera dorénavant sur la base de quatre classes, au lieu de cinq, afin de s'ajuster avec les nouvelles classifications fédérale et provinciale. Une fois acceptés par la RMAAQ, les prix 2017 s'établiraient ainsi: Doré à 2,95 \$, Ambré à 2,94 \$, Foncé à 2,85 \$ et Très foncé à 2,55 \$. Pour les sirops de la Catégorie de transformation canadienne, le prix demeure à 1,80 \$, tandis que la prime





offerte pour le sirop d'érable certifié biologique passerait de 0,175 \$/livre à 0,18 \$/livre.

La convention de mise en marché doit être négociée et homologuée par la RMAAQ tous les deux ans.

LE YOGOURT QU'ON AIME ENTIÈREMENT

Yoplait a lancé le premier yogourt au lait entier offert au Canada. Ce nouveau yogourt 3,25 % M.G. est



offert en neuf saveurs, toutes sans gélatine, agent de conservation, édulcorant artificiel, couleur ou saveur ajoutée. Le paquet de 12 unités de 100 g se vend au prix de détail suggéré de 5,99 \$.

Pour promouvoir le lancement du produit, le mois dernier, Yoplait a fait appel à la firme Cossette pour concevoir une campagne publicitaire à la télévision et en ligne sous le slogan "Entièrement gagnant." Au Québec, l'entreprise moussera également le yogourt en partenariat avec Radio-Canada par le biais de l'émission "Les enfants de la télé." Le concours, qui se déroule jusqu'au 21 mars 2017 (tirage le 22 mars), comprend comme grand prix des électroménagers d'une valeur de 10 000 \$, ainsi qu'un approvisionnement en yogourts Yoplait pendant un an.

Canards à Gogo



Les Canardises: de la France au Québec, enpassant par l'espace PAR MARK CARDWELL ascal et Yolande Klein ont connu beaucoup de bons moments ces 14 dernières années, depuis qu'ils ont déménagé au Canada avec leur famille sur une ferme de canards qu'ils ont dénichée dans un coin pittoresque du Québec. Mais ils étaient ni plus ni moins qu'au septième ciel quand l'astronaute

canadien Chris Hadfield a apporté leurs rillettes de canard (pâté de canard) en orbite en 2012. "Ma femme ne pouvait pas croire qu'un produit fabriqué à partir de sa recette dans la petite cuisine commerciale de notre sous-sol était rendu dans l'espace," se rappelle Klein.

Chaque année depuis 2003, les Klein et leurs trois enfants, maintenant adultes — Pierre, Camille et Paul — ont élevé des milliers de canards mulards et musqués dodus sur cette ferme de 50 acres dans le village montanier de St-Ferréol-les-Neiges en banlieue nord de Québec. Ils fabriquent ≁



une vingtaine de produits alimentaires à partir de la viande de canard, élevés à l'extérieur, préparés et cuits sur place.

Ces produits incluent de la viande fraîche, du foie gras et des conserves, comme les rillettes de canard que l'Agence spatiale canadienne (ASC) a ajouté à un panier de Noël que Hadfield a emporté avec lui le 19 décembre 2012, quand il s'est envolé pour une mission de cinq mois dans la Station spatiale internationale en tant que premier commandant canadien.

En plus des ventes directes découlant des consommateurs qui visitent leur ferme et de certains restaurants haut de gamme, les Klein ont développé un réseau de détail totalisant près de 100 points de vente pour leurs produits à travers le Québec. La plupart des emplacements sont des magasins d'alimentation de spécialité, mais une douzaine d'épiceries IGA indépendantes du Québec font également partie du groupe.

Selon Pascal Klein, sa famille est maintenant en pleine expansion pour tenter de répondre à la demande croissante de leurs produits, tant à l'intérieur qu'à l'extérieur du Québec, en particulier à Napa Valley et dans d'autres régions gastronomiques, riches en vignobles — en Californie et ailleurs. Au cœur de l'agrandissement se trouve un nouveau bâtiment de deux étages en cours de construction à la ferme, à deux pas du bâtiment actuel où se déroulent les activités. Une fois terminé ce printemps, le nouveau bâtiment permettra davantage de transformation animale et disposera d'une cuisine commerciale beaucoup plus grande, certifiée HAACP.

La construction marque aussi un changement générationnel de propriété, comme les deux plus vieux enfants des Klein — Pierre et Camille — prendront les rênes de l'entreprise.

"Je suis vraiment impatient," confie Pierre, 29 ans, père de deux jeunes enfants (bientôt trois), qui a étudié la gestion hôtelière, mais qui a passé les dernières années à travailler dans une mine au nord du Québec. Il est en train de déménager sa jeune famille à St-Ferréol-les-Neiges pour s'occuper de l'entreprise familiale avec sa sœur, laquelle s'occupe du marketing de la comNous avons des plans et des projets motivants en tête pour l'entreprise. Néanmoins, nous avons à coeur de continuer à développer et à bâtir sur le succès de nos parents.

pagnie tout en fréquentant l'université à Montréal.

"Nous avons des plans et des projets motivants en tête pour l'entreprise," déclare Pierre Klein. "Néanmoins, nous avons à coeur de continuer à développer et à bâtir sur le succès de nos parents."

Ce n'était guère plus qu'un rêve utopique il y a 20 ans, quand les Klein sont venus pour la première fois au Québec en vacances. "Nous sommes vraiment tombés en amour avec l'endroit," se souvient Pascal Klein, qui travaillait comme technicien d'optométriste en France, alors que Yolande travaillait pour la Banque de France. Tous deux viennent de l'Alsace, une région rurale française notamment réputée pour ses plats d'oies et de canards.

Selon Klein, sa femme et lui rêvaient de posséder leur propre entreprise. Mais l'infâme bureaucratie intrusive et interminable de leur pays natif et l'administration civile ont poussé leur désir à se concrétiser de l'autre côté de l'Atlantique, en s'y installant avec leur jeune famille. En 2000, ils ont déménagé au Québec pendant un an, ont inscrit leurs enfants à l'école et ont eux-mêmes suivi des cours d'affaires et cherché des occasions commerciales. "Nous étions ouverts à tout ce qui se faisait dans l'agriculture," commente Klein. Nos seuls critères étaient que nous voulions posséder une ferme, avoir de la latitude et ne pas perdre d'argent."

Après leur retour en France, le couple a pris la décision d'acheter une ferme à St-Ferréol et de démarrer une exploitation de canards. Ils ont déménagé ici pour de bon en 2002 (bien que Yolande soit retournée dans le sud de la France cette année-là pour suivre un cours sur l'élevage de canards). Les Klein ont reçu leur premier arrivage de canards — 200 canetons d'un jour livrés dans une grosse boîte d'un fournisseur québécois — au printemps 2004. "C'était vraiment quelque chose de passer du papier et de la théorie à la manipulation d'animaux vivants," relate Klein en riant.



Déçus par la qualité de ce premier lot de canards, les Klein ont commandé et importé des canards mulards adultes reproducteurs, plus vigoureux et dodus, d'une ferme ancestrale d'élevage de canards située dans le sud de la France. "Notre objectif était d'élever les canards à l'extérieur. Pour ce faire, nous avions besoin de canards descendant génétiquement d'une lignée d'animaux ayant été élevés dans ces conditions," explique Klein.

Dès le premier lot de 500 canards adultes reçu, les Klein ont commencé à élever et à transformer un nombre de plus en plus grand de canards mulards et musqués chaque année. Nés dans un couvoir à Québec à partir d'oeufs recueillis sur la ferme des Klein, les canetons arrivent à l'âge de un jour et passent trois semaines à l'intérieur. Ils sont ensuite déplacés à l'extérieur pendant 18 semaines, jusqu'à ce qu'ils atteignent leur poids d'abattage d'environ 3,5 kg. Selon Klein, c'est trois fois la taille des canards



sauvages, et deux fois le poids — et le goût — des variétés de canards asiatiques, lesquels sont normalement abattus après 10 semaines.

Contrairement aux gros joueurs de l'industrie qui peuvent élever jusqu'à deux millions de petits canards asiatiques par an, les Klein n'ont transformé que 6,000 bêtes en 2016. Cependant, la qualité de leurs produits a contribué à faire de Les Canardises un grand nom dans le marché des aliments de niche canadien en pleine croissance. Leur viande de canard fraîche se vend actuellement 38 \$ le kilo: un prix, selon M. Klein, "un peu plus élevé que la norme de l'industrie, en raison de notre approche artisanale" — et qui peut actuellement se comparer à la valeur du bœuf.

Alors que Pascal Klein et ses enfants s'occupent de l'agriculture et de la transformation (notons que les Klein gavent leurs canards pour faire du pâté, mais l'abattage est effectué dans une installation fédérale certifiée à une heure de route de la ferme), Yolande et un employé cuisinent et mettent les produits en conserve en suivant les recettes maison de Yolande. "Mon père s'occupe aussi des aspects marketing et ventes, ainsi que de la paperas-



serie," mentionne Pierre Klein. "Quant à ma mère, elle est une cuisinière hors pair: la meilleure que je connaisse!"

Les Klein ont commencé à vendre leurs produits au marché du Vieux-Port à Québec, et ils y tiennent toujours un kiosque. Leur réseau de distribution continue de se déployer à mesure que la valeur de leurs produits est reconnue. Chris Hadfield a également sans l'ombre d'un doute contribué à cette notoriété en emportant un de leurs produits dans l'espace. "Nous pensions que c'était une blague," raconte Klein, en parlant de l'appel fortuit de l'ASC pour commander le produit. "Mais, l'étonnement s'est rapidement transformé en enthousiasme."

IPPE 2017

The 2017 International Production & Processing Expo took place in Atlanta from Jan. 31 to Feb. 2, 2017. The show had 1,273 exhibitors and more than 30,000 visitors. It's one of the largest annual trade shows for the poultry, meat and feed industries, and focuses on innovation, education, global reach and networking. If you missed this year's show, here's a peek at some products and services *Food in Canada* found there. The next IPPE takes place in Atlanta from Jan. 30 to Feb. 1, 2018. Visit www.ippexpo.org for more information.

Functional ingredients

World Technology Ingredients Inc. offers functional ingredients to help improve products by inhibiting pathogens, extending shelf-life, reducing sodium content, enhancing product flavour, maintaining yields and improving product quality — tenderness, flavour, slice-ability and colour. WTI's product line includes organic, clean label, all-natural antimicrobials and all-natural shelf life extenders. **www.wtiinc.com**

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Gas expertise

During the show Praxair highlighted its temperature control systems, gas application expertise, and service and systems support. Praxair produces liquefied carbon dioxide and nitrogen gases for cryogenic freezing and chilling of food products. The ColdFront brand of cryogenic gas systems offer rapid heat removal, efficient use of cold cryogenic gas, and increased productivity. www.praxairfood.com

Separators & metal detectors

Eriez manufactures a full line of Permanent and Electromagnetic Separators for both wet and dry processing lines. The company's E-Z Tec Metal Detectors can help keep product free of non-ferrous metallics, while bin Vibrators can ensure that bulk powders and granular materials discharge easily from storage hoppers. Eriez's electro magnetic and electro mechanical Vibratory Feeders and Conveyors can help keep products moving along the processing line.

www.eriez.com

It's show time



Messe Frankfurt is a leading trade fair organizer, generating around EUR 645 million in sales and employing 2,297 people. The Messe Frankfurt Group has a global network of 29 subsidiaries and 57 international sales partners, allowing it to serve its customers in more than 160 countries. Messe Frankfurt events take place at more than 40 locations around the globe. Its flagship events provide an international transfer of knowledge on key food industry topics such as hygiene, automation, traceability and product safety. **http://iffa.messefrankfurt.com**

Reliable & sustainable solutions

The Baldor Electric Company offers electric motors, variable frequency drives and mechanical power transmission products. The company also offers a line of value solutions that can lower total cost of ownership. These include helping customers reduce energy consumption, eliminate wasteful maintenance and reduce onsite inventory. The company offers the Baldor-Reliance motors that are designed specifically for the food and beverage industry. **www.baldor.com**

Mixers & more

JBT offers a wide range of solutions including: Wolf-tec brine preparation, injection, maceration, tenderization, product handling and vacuum loading, massaging, and TVI meat slicing systems; DSI waterjet portioners, red meat and pork belly trimming sytems, and portioning software; Stein coating and cooking systems including THERMOFIN fryers, GYROCOMPACT spiral ovens, JSO Jet Stream ovens and Double D Revoband linear ovens; and Frigoscandia freezing and refrigeration systems, which include the GYROCOMPACT self-stacking and the ADVANTEC linear/impingement freezing system. **www.jbtcorporation.com**

Meat & poultry packaging

Handtmann Inc. offers best-of-breed filling, portioning and linking equipment, providing practical value with efficient technology and services for processors. Handtmann provides machines, technology and services for all sizes of meat filling lines and processing businesses. Handtmann's products can offer design innovation and lifecycle value. www.handtmann.ca



Food formulation solutions

Kerry provides innovative food and beverage solutions. The company offers research, development and application services, sensory testing, regulatory insight, high food safety standards, and food chefs and experts. The company also works with clients to solve challenges with food formulations, implement



better manufacturing processes and understand consumer needs. **www.kerry.com**

Sausage production

The Vemag LPG208 High-Speed Length Portioning Machine from Reiser offers highquality sausage production, with accurate portioning and consistent performance and reliability. The unit, which Reiser says is the fastest natural casing linker in the industry, allows processors to increase sausage production by 30 to 50 per cent. Featuring two rotating linking horns, the LPG208 reduces casing change time, making production more efficient, with less risk of split casings. The unit can be used in the production of fresh or cooked sausage in natural casings. Collagen and cellulose casings can also be used. **www.reiser.com**

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Ray Price, president of Sunterra.

Sunterra Meats Trochu, Alta.

Carol Neshevich

Would say that meat is in the Price family genes. As owners of Trochu, Alta.-based Sunterra Meats — part of the family's Sunterra Group, which also includes Sunterra Farms and Sunterra Markets (a chain of retail food stores in Calgary and Edmonton) — their business has roots that go back more than four decades, starting as a family farm. "Coming from a farming background, we always had a long-term vision for value-added food," says Ray Price, president of Sunterra. "This has allowed the company to grow and develop."

While it all began with the farming business run by Ray's parents Stan and Flo Price, by late 1989 the family decided to purchase a small provincially inspected pork and beef processing facility from a group of farmers in Trochu, Alta., and Sunterra Meats was born. "It had been originally set up to generate some jobs in the local area, and provide pork and beef to Alberta customers," explains Price, who currently runs Sunterra alongside his brothers. "The plant was purchased



by Sunterra so that the company could understand meat quality and provide high-quality products from Sunterra's own farms to the new stores being set up by Sunterra Markets." The Price family launched Sunterra Markets in Calgary in 1990 "to showcase the top-quality meat and provide customers with a unique European-style shopping experience," according to the Sunterra Markets website.

By 1993, the Trochu plant had undergone extensive expansion and renovations to enable it to receive CFIA federal inspection status. It stopped processing beef and started to sell pork into the Japanese market, and according to Price, "the product was well received. A few more expansions and many visits from Japanese customers later, and the company was well entrenched in the high-quality Japanese market, where over 70 per cent of its production is now sold."

Today, Sunterra Meats produces chilled pork products and exports to the U.S., Mexico and Japan, and is beginning to sell some products into China. According to Price, 80 per cent of the product produced at the Trochu facility is exported. "The company was recently awarded an Alberta Export Award in the Agrifood category," he says with pride. "We believe there are opportunities in the international markets and we are growing in two areas. Our plant in Trochu will be able to increase pork production by 50 per cent and we expect a significant amount of that product to go to Europe and Asia."

Continuing its tradition of growth and evolution, the Price family has recently

partnered with an entrepreneurial family in Italy to start a new company called Soleterra d'Italia: a 50/50 partnership between Sunterra and the Simonini family. "A new plant at Acme, Alta. is being built to produce high-quality Italian dry cured meats from pork supplied from Sunterra Meats," says Price. "The Simonini family has been making dry cured Italian meats for generations. They will be utilizing the high-quality pork to make premium cured products. The ability to track the feeding and genetic programs back to the farm of origin, combined with unique processing at Sunterra Meats, promises to make Soleterra d'Italia a very high-quality offering." •



Q: What makes Sunterra Meats unique?

A: "Sunterra Meats is very small [compared to] other federally inspected plants. It specializes in unique specifications, from feeding programs for its pigs to the way the pork is cut. Other unique processes in the production of pork generate a high-quality product with full traceability back to the farm of origin."

Q: What are the current challenges and opportunities in the meat industry?

A: "A couple of big challenges are trade barriers and risks around access to markets, and labour supply in rural areas for meat processing plants. The biggest opportunities are expanding markets around the world...The opportunity to expand our production and sales into Europe through the new CETA agreement is possible if we can make sure that there are no non-tariff barriers holding us back."

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