FOOD in CANADA

Canada's food & beverage processing magazine

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Meat-replacement options now on the market PG.23

Inside:
PETFOOD
IN CANADA
PG.27

WHO'S EATING WHAT?

THE EATING

HABITS OF TODAY'S GENERATIONAL COHORTS PG.19

RESEARCH CHEFS IN CANADA

PG.48

PLUS MNP ONTARIO REGIONAL

ROUNDTABLE

PG.39













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contents



departments

- **Editorial**
- **News File**
- 15 **Market Trends** Market outlook and highlights from Dr. Larry Martin and Associates.
- 16 **Focus on Food Safety** Let's get small.
- 17 **Food Law** The prudent use of antibiotics in animal production.
- 18 **Regulatory Affairs** Supplemented foods.
- 22 **Ingredient Spotlight** The versatile jackfruit.
- 26 **Sensory Trends** Hold the meat.
- 46 **Rethinking Innovation** How is food evangelism reshaping your corporate strategies?
- 47 **Ask the Expert** How companies can manage food fraud.
- 52 **Product Showcase:** Bakery Showcase 2016, and pre-show preview of IFT2016.
- 54 **Industry Insider** Richmond Hill, Ont.-based GraceKennedy (Ontario).

AD INDEX

Who's eating what?

Food in Canada looks at the eating habits and food demands of today's generational cohorts.

features

Vegging out

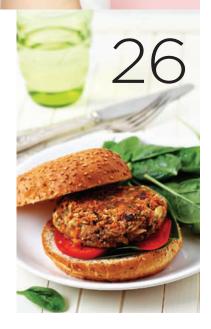
For consumers seeking vegetarian and meat-replacement options, a wide variety of packaged, ready-to-eat choices, spanning an array of global cuisines, awaits.

39 **Ontario Regional Roundtable**

> Food in Canada's Ontario regional roundtable, sponsored by MNP LLP and presented in partnership with Food and Beverage Ontario, discusses "Growth Strategies for Ontario Processors."

45 **Destination Europe**

> Part II in our look at CETA and the Canadian Food industry.



in this issue

27 PETFOOD CANADA



Research Chefs in Canada

48

49 A Culinary Odyssey

Recipe to Retail: Packaging





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Carolyn Cooper



Meatless goes mainstream

Last month marked Toronto's fifth annual Veggielicious festival, a two-week "gastronomic extravaganza" featuring more than 60 Greater Toronto Area restaurants, bakeries and cafés that specialize in mouth-watering vegetarian and vegan options.

The culinary celebration is co-ordinated by the Toronto Vegetarian Association (TVA), and is akin to the city's popular Winterlicious and Summerlicious marketing initiatives. During these events participating eateries offer prix-fixe menus and other specials, drawing in repeat customers and encouraging new visitors with adventurous offerings at appealing prices.

The association also organizes Veg Food Fest each September, which draws more than 40,000 visitors, making it North America's largest vegetarian food celebration of its kind.

It's clear that meatless dining has gone mainstream, as more consumers seek vegetarian and vegan options for a variety of reasons, including ethical, cultural, environmental, religious, health and, of course, the desire for something different and delicious.

The numbers seem to support this. A recent survey conducted by Ipsos MORI in the U.K. showed that the number of vegans in Britain has risen more than 360 per cent in the last 10 years, making them now more than one per cent of the population. Forty-two per cent of those

who claimed to follow a vegan lifestyle were between 15 and 34 years old, and 88 per cent lived in urban areas. The poll also showed that there are now 1.14 million vegetarians over age 15 in Britain.

Closer to home, a new U.S. study by Wakefield Research reveals that 55 per cent of Americans polled say they plan to consume more plant-based cuisine this year, with 19 per cent saying they plan on eating much more. As well as showing similar results in terms of younger consumers and vegetarianism, interestingly 61 per cent of women, compared to 49 per cent of men, say they are planning to eat more plant-based food.

In Canada, a poll commissioned by the Vancouver Humane Society released last summer shows that 33 per cent of consumers, almost 12 million Canadians, say they are vegetarian or are eating less meat. Eight per cent of those say they primarily follow a vegetarian diet — and that number jumps to 12 per cent across the country among 18- to 34-year-olds.

If you're not already offering vegetarian or vegan options, it's time to ask yourself "why not?" Turn to pg. 23 for more inspiration.

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Space tech to feed Canada's north?

Canadian researchers are adapting a hydroponic system that was designed to feed astronauts as a way to harvest fruits and veggies year-round in the challenging climate of Canada's north, where food insecurity is a major issue. The prototype will be tested out in Hay River, Northwest Territories. Environmental biologist Mike Dixon of the University of Guelph, who is heading the research, says the environment on the moon or Mars and the environment of the Northwest Territories are comparably harsh when it comes to growing food, so it makes sense that the same technology would be used.



News>file





Love at first taste?

Is flavour preference relevant to romantic attraction? It would seem so, according to new global research by Knorr, which revealed that 78 per cent of people claimed to be more attracted to people who enjoy the same food flavours as them. The research involved 12,000 people in 12 countries, including Canada.

To put the theory to the test, Knorr conducted a fun social experiment. It paired complete strangers, based on their love of the same flavours, discovered using the Knorr Flavour Profiler, which can be found online at myflavour.knorr.com. The results of the experiment were captured in a fun short film called "Love At First Taste," made by director Tatia Pilieva (available for viewing on YouTube).

In just over a week after its launch at the beginning of May, Knorr's "Love at First Taste" campaign had gone viral, garnering an impressive 84 million views. And in a lovely turn of events, during the filming two of the matched strangers — Irma Adinda, 26, and Antonio Bustorff, 31 — actually found romance and started a relationship after being matched up based on the food and flavours they like.

Earls reverses controversial beef decision

In a surprising turn of events, Vancouverbased Earls restaurant chain recently reversed its controversial decision to start getting all of its beef from a U.S. supplier that specializes in humanely raised and slaughtered cows.

Just one week earlier, Earls had announced that it would be switching suppliers and would start sourcing its beef from a Kansas supplier that was accredited by Humane Farm Animal Care. This move caused a very angry reaction from various members of the Canadian cattle industry, particularly in Alberta. There was also a huge backlash on social media from countless Canadians who were upset with the decision, some of whom were urging an Earls boycott.

On the morning of May 4, Earls issued a press release stating that the restaurant chain had "listened to Albertans" and that it will be bringing Canadian beef back into its restaurants, working with local farms to build a supply of Alberta beef that meets its criteria.

"We made a mistake when we moved away from Canadian beef," says Earls president, Mo Jessa. "We want to make

this right. We want Canadian beef back on our menus so we are going to work with local ranchers to build our supply of Alberta beef that meets our criteria."

Jessa adds, "We have deep roots in Alberta. We started in Edmonton and we have many operations and employees here. Alberta has supported us. We need to support Alberta, especially in tough times. We moved to a U.S. supplier as we thought they could supply all of our needs. It was a mistake not to include Canadian beef."

The press release went on to say that Earls is committed to sourcing as much beef as possible from Alberta, and that the chain will work to build more of the supply it needs.



The Tea Book, written by renowned Canadian tea sommelier Linda Gaylard, is a visually attractive reference book that showcases various teas from around the world. It features more than 100 tea recipes, along with helpful notes on steeping, as well as a fascinating look at nearly 500 years of tea history. The book also takes readers on tours of tea plantations, from India to Kenya, and shows stepby-step recreations of different tea ceremonies

from around the globe.

Belmont Meats celebrates 50th anniversary

Toronto-based Belmont Meats is hitting a major milestone, as it celebrates 50 years in business this year. "We're excited to mark such an important milestone this year and very proud of the legacy we've created as a company," says Belmont CEO Paul Roach. "We believe in making safe, affordable, great-tasting food choices available to everyone. We believe our purpose is to ensure this happens and to inspire others with the same beliefs."



Belmont's made-to-specification beef products — including a diverse line of premium burgers and steaks — can be found at retailers, club stores, restaurants and foodservice distributors across North America and international markets as private-label offerings and Belmont-branded items. Belmont prides itself on its innovation: its research and development team regularly cooks up creative solutions in the company's restaurantstyle test kitchen.

"We're always looking to come up with world-class flavour and develop products that not only capitalize on trends, but also set them," says Roach. "A focus on innovation means we can create personalized products that are made to specification, on trend and ahead of the curve."

Jerusalem Artichoke Association of Canada launched



A new commodity group was launched earlier this year when the Jerusalem Artichoke Association of Canada (JAAC) was incorporated.

Jerusalem Artichoke (Helianthus tuberosis) is a plant that's native to Canada, known as topinambour in French. It's also called sunchoke, sunroot and earth apple. The stems and stock above ground can be used as forage, while the tubers that grow below ground can be cooked and eaten in a variety of ways. The tubers are one of the richest sources of the prebiotic inulin and this has stimulated interest by consumers looking to eat "gut healthy food."

The JAAC is hoping to serve as a focal point for growers, processors, end users, and consumers who are looking to increase the visibility, consumption, and use of this native plant. More information and a registration form to join the JAAC can be obtained by e-mail at mail2jaac@gmail.com.



> Nestlé Canada announced in May that it has achieved a 10-per-cent reduction in sodium across its portfolio of products (by volume), ahead of the planned end of 2016 date. The reduction in sodium is one of many global commitments Nestlé made to improve the nutritional profile of its products.

> Cineplex Digital Media (CDM) has been selected by The Beer Store to help digitize and revamp its shopping experience. Their new solution modernizes the retailer's "Beer Wall," which has traditionally been a static display of cans and bottles representing the store's beer offerings, by replacing it with interactive tablets that can help reduce clutter and

streamline operations.



> Maple Leaf Foods has launched "Maple

Leaf Canadian Craft," a new lineup of craft meats inspired by iconic Canadian



flavours. Each product is made from pork raised by Canadian farmers and premium, natural ingredients. The Maple Leaf Canadian Craft lineup includes: Atlantic Course Salt Prosciutto; Canadian Whisky and Apple Bacon; Montreal Steak Spice Capicollo; Montreal Style Smoked Meat Wieners; Okanagan Inspired Garlic & Herb Salami; Ontario Inspired Cherrywood Smoked Ham; and Quebec Maple Ham.

- > The Manitoba Food Processors Association (MFPA) announced at its Annual General Meeting in May that it has rebranded itself as Food & Beverage Manitoba. Along with the new name, the rebranding includes a new brand identity, as well as a website: foodbeveragemb.ca.
- > Christie Lohr, founder of Style Nine to Five and Beauty Nine to Five, has teamed up with Jesse Bannister to launch Bev Nine to Five (bevninetofive.com), an online job board connecting beverage industry experts with desirable companies and jobs.

SUPPLIER NEWS



- > Dealers Ingredients has recently launched Natralein pea protein and Natralein Brown Rice protein. Both of these competitively priced ingredients consist of a single source protein isolate of greater than 80 per cent protein.
- > Prinova has announced a new distributorship with Apiscent Labs. Prinova will be the exclusive distributor of Apiscent Labs' flavour and fragrance ingredients in the U.S.
- > Ventura Foods has reached an agreement to acquire the Dressings, Sauces and Mayonnaise business of Minneapolis, Minn.-based Cargill.

PEOPLE ON THE MOVE





- > MULTIVAC, Inc. has hired **Drew Lericos** as Marketing director for its U.S. business. Lericos will lead the product management team, trade communications, trade show execution and customer engagement initiatives.
- > The Canadian Federation of Agriculture

(CFA) has officially appointed **Errol Halkai** as executive director. He joined the CFA in 2009 as an international trade consultant, and has held the position of acting executive director since 2015.



The winners are...

Last month Food in Canada and Grant Thornton presented the 2016 Leadership Awards to five Canadian food and beverage businesses. To read profiles of each company see our April 2016 issue, or visit www.foodincanada.com

G.E. Barbour

GROWTH AWARD



(L-R) Blair Northcott, partner, Grant Thornton, presents the Growth award to G.E. Barbour president Sylvia MacVey.

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Nestlé Canada Inc. Stewardship

Real Food for Real Kids Health & Wellness

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Recognizing exemplary companies in the food and beverage industry inspires others, which results in successful growth throughout the industry. That's why Grant Thornton LLP continues to be a proud sponsor of the Food in Canada Leadership Awards.



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INNOVATION AWARD



(L-R) Cody Lohnes, Tax senior manager, Grant Thornton, and Jeff Sabean, partner, Grant Thornton, present the Innovation award to haskapa's Liam Taylor.

Nestlé Canada Inc.

STEWARDSHIP AWARD

(L) Rosanna Lamanna, partner, Grant Thornton, and (R) Jim Menzies, partner, Grant Thornton, present the Stewardship award to Shelley Martin, president and CEO of Nestlé.



Photo: Stephen Ferrie



Steam Whistle Brewing

COMMUNITY & INDUSTRY LEADERSHIP AWARD

(L) Rosanna Lamanna and (R) Michael Freckleton, manager, Grant Thornton, present the award for Community & Industry Leadership to Steam Whistle Brewing's Cam Heaps and Sybil Taylor.





Real Food for Real Kids

HEALTH & WELLNESS AWARD

(L-R) Rosanna Lamanna presents the award for Health & Wellness to David Farnell and Lulu Cohen-Farnell, co-owners of Real Food for Real Kids.



Photos: Stephen Ferrie



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COMMENTARY: Structural problems

I generally like to be positive, but I'm beginning to wonder whether anyone in Canadian politics has a strategic bone in their body when it comes to the economy. It seems obvious that agriculture and food should be a central part of a wealth strategy for a country with the world's third largest endowment of arable land per capita and about 10 per cent of its fresh water. But no one who designs policy seems to consider it. Canada's share of world trade is falling (except for canola and pulses). Our food processing industry has a growing negative trade balance of \$9 billion annually. With huge and growing opportunities and all these resources, why are we declining? Again, who is thinking strategically, considering:

• Until very recently, there were very few efforts made to increase foreign market access for Canadian food products, and the current government is dragging its heels on ratifying TPP. This maintains Canada's cost disadvantage resulting from its small geographically disperse population. Most industries benefit from economies of size, which can't be obtained without access to large markets. No market access, no investment.

- Consecutive (mainly provincial) governments have moved us from the lowest to nearly the highest costs of energy in North America. Other jurisdictions perceive that technology and markets will move to alternative energy rapidly, so take advantage of low-cost energy while we can and invest in diversification.
- Health Canada and the CFIA construct a morass of ponderously slow, inconsistent regulatory processes that discourage investment in our relatively small economy and encourage great new ideas to be commercialized elsewhere.
- Major industrial provinces continuously raise minimum wages to among the highest in North America.

Thinking strategically would focus on how to use our regulatory systems and resources to simultaneously provide high levels of safety and competitive advantage to our industries.

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

Commodities trended modestly higher in April/May as world market conditions evolved interestingly.

- > Grains: The grains and oilseeds are not moving together: oilseeds are up, but soy oil and wheat are down, and corn is essentially sideways. The general tone is more positive than recently because of weather in South America and strong demand for protein and carbohydrates. Managed funds have become increasingly bullish on soybeans, soy meal and, now, corn. Offsetting these factors is an early spring and good seeding conditions in the U.S. Growing conditions in June and July will determine price trends.
- > Corn: After rallying to \$4.07, July corn dropped to \$3.68 before recovering to the current \$4 area. Fundamentals changed to a more bullish tone: U.S. exports will likely exceed USDA forecasts for the year; domestic use will rise because of expanding livestock herds and higher gasoline consumption; and

the smaller South American crops. Speculative funds moving to net long are supportive. We suggested pricing on a move toward support. If you did, hold it. If not, protect above \$4.05.

- > Soy oil: July declined from \$0.35 to the current \$0.311 following palm oil. Palm was affected by reduced export demand. This is in major contrast to soybeans which rose from \$9.50 to \$10.50 over the same period, led by soaring meal prices. The current oil prices are at support and there is another level at \$0.30. Either is a good place for pricing, but protect above \$0.35.
- > Wheat: Wheat isn't facing the same bullish pressures as soy and corn, with large stocks and excellent production prospects in the Black Sea and Europe. Concerns about weather in the U.S. Southwest and upper Midwest are too early to take seriously. At \$4.64, July is just above contract lows of \$4.50. We suggested that the short-term (\$4.50 for July) and long-term (\$4.25) support planes are good places to do some pricing.
- > Sugar: July sugar broke through the \$0.168 resistance mentioned last month, making 21 month highs over \$0.17, driven by drought in India and Thailand. We still like protection at \$0.168 if not already at \$0.1535, as suggested
- > Natural gas: July natural gas fell from its recent high of \$2.40 to \$2.10, as U.S. inventories build up toward a surplus position. But power plants continue using more gas than in 2015

- and new production is slowing because of low prices. We continue to suggest pricing near \$1.93, or covering above \$2.63.
- > Crude oil: Low U.S. inventories, smallest new discoveries since 1952, fire in Alberta and large net long positions by spec funds ran July up another \$3 to almost \$50. Conversely, production and exports by Iran and Saudi Arabia are up, with Iraq wanting to grow. Technically, the market is at significant resistance and is overbought. We suggested covering above \$45.20. With this technical weakness, we might suggest taking profits here, but would cover with Calls because of the uncertainty.
- > Canadian dollar: As oil climbed, the loonie fell from \$0.80 to the current \$0.763 on September, the largest divergence between the two in months. Why? First, oil production is down because of the Fort McMurray fire, so higher prices are offset by lower production. Second, the Bank of Canada governor is "talking it down" hinting at a lower range of -0.5 per cent for interest rates. Third, Canada's trade balance is negative and getting worse, implying some serious structural problems (see above). We suggested that commodity buyers cover at \$0.77. If you didn't, the next level of support is \$0.75.

Ron Wasik



countless exciting opportunities but also numerous challenges to our industry.

Let's get **small**

ince writing on nanotechnology over two decades ago, the science of the very small has grown to become a substantial multibillion-dollar global industry backed by more than \$5 billion in annual research funding from industrialized nations like the United States, Australia and Japan, as well as the European Union. Nanoscale materials can now be found in countless consumer products, including food and food packaging.

Science of the very small

By way of a visual image, one nanometer is like a toy glass marble compared to the planet earth. There are two broad fields of research in nanotechnology. The first field concerns the properties that nano-size particles provide to materials in a wide array of applications. The second field concerns the assembly of atoms and molecules into functioning nanoscale devices. Currently most nanotechnology applications within the food industry come from introducing nano-size compounds into foods, packaging and food processing equipment.

As conventional materials such as metals, metal oxides, silica and clay are reduced to less than 100 nm in particle size, the laws of physics change from the conventional to what scientists call the "quantum size effect" where the mechanical, electrical, thermal, chemical and optical properties become quite different from their macro state. It is these new properties that nanoparticles provide to food ingredients, packaging materials and food contact surfaces that present

Ingredient benefits

Nanotechnology provides solutions for our industry to overcome common ingredient problems like poor solubility, high melting point, chemical instability, poor bioavailability and undesirable ingredient interactions by "nanosizing" the delivery systems. Typically this involves forming nanoemulsions, microgels, biopolymers and liposomes that overcome the challenges of incorporating ingredients that are normally difficult, if not impossible, to incorporate into foods by traditional means.

Packaging benefits

Nanotechnology can contribute substantial benefits to food packaging. For example, metals (zinc, silver, copper, gold, platinum), metal oxides (zinc oxides, titanium oxide, magnesium oxide), organically modified clay, and natural antimicrobials (carvacrol, nisin, thymol, isothiocyanate and ethanol) in nano-size forms imbedded in food packaging materials have been reported to inhibit bacterial growth to varying degrees. Ferric oxide and metal salts have been demonstrated to be effective oxygen scavengers when used in separate sachets or incorporated into packaging film. Nano-size polymers, aluminum oxide and silicone dioxide incorporated into packaging film and nano-thick



metallic layers can improve film strength and have also demonstrated excellent gas barrier properties. Non-transparent materials are invisible in their nano form within food packaging materials. When incorporated into packaging film, titanium dioxide and zinc oxide provide excellent UV protection.

Significant challenges

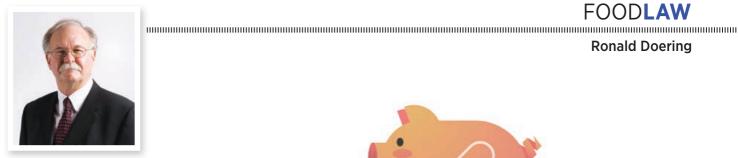
There are concerns that nanoparticles may present significant health risks to humans. Animal-based tests show that airborne and ingested nanoparticles may lead to a variety of conditions including fibrosis, premature skin aging, chromosomal damage, heart disease and neurological disease. There is also uncertainty around the impact of nanoparticles on our ecosystem.

As already noted, governments in developing countries are investing heavily in nanotechnology. Food safety concerns are addressed differently around the globe. On the whole, governments appear to be providing basic food safety guidelines to industry and placing the onus on industry to ensure that products incorporating nanomaterials are safe.

Nanotechnology has demonstrated that it can enhance food safety, provide better physical protection, and extend product shelf life. This said, industry must proceed cautiously to ensure products incorporating nanomaterials are safe for their intended use and that the technology is managed carefully to minimize any impact on our environment.

Dr. R.J. (Ron) Wasik, PhD, MBA, CFS, is president of RJW Consulting Canada Ltd. Contact him at rwasik@rjwconsultingcanada.com

Ronald Doering



Prudent use of antibiotics in animal production

How are we doing?

hile the medical community recognizes that the emergence and spread of antimicrobial resistance (AMR) in humans is a potential disaster for humanity, and that it is the overuse of antimicrobials in human medicine that is the largest contributor, there is still a broad consensus that the use of antibiotics in animals may contribute to the problem, though the degree is still unclear.

The scale of the AMR crisis was dramatically demonstrated recently with the release on May 19, 2016 of a landmark report to the U.K. government that reckons that drug-proof bugs already kill 700,000 people a year and warns that that number is likely to rise to at least 10 million by 2050. I wrote a series of articles for this magazine in 2013 and in the spring of 2014 discussing various reports that attempted to assess the extent to which antibiotics in animals contributed to the crisis and I identified a number of regulatory changes to mitigate the problem that were necessary and long overdue.

That spring the Canadian Animal Health Institute (CAHI), the trade association representing Canadian veterinary drug manufacturers, and Health Canada (HC) announced their intention to work together to develop a policy on prudent use of antibiotics. They promised (1) the removal of growth promotion and/or production claims of medically important

antimicrobial (MIA) drugs and (2) to develop options to strengthen veterinary oversight of antimicrobial use in food animals. At the same time producer organizations were developing strategies to promote more prudent on-farm use, and veterinary groups undertook to develop new policies and procedures.

So, after all the promises, undertakings and commitments, how are we doing? I'm delighted to report: pretty well.

In March 2015 the Harper government announced the Federal Action Plan on Antimicrobial Resistance and Use. committing to move expeditiously on several regulatory reforms. I'm told that notices in Canada Gazette I are imminent and that these will bring in regulatory amendments that will remove growth promotion claims for all MIAs. Moreover, all MIAs used in feed and water would come under prescription drug status, bringing them under the oversight of veterinarians. CAHI estimates that this would bring 140 drugs under veterinary oversight.

I'm pleased to report as well that the federal government is finally taking steps to address the longstanding problem of animal owners taking advantage of HC's own use importation provisions (OUI) to import for personal use active pharmaceutical ingredients (API) that are not approved for sale in Canada. There are several problems with this regulatory gap, including the inability to know which antimicrobials are used in Canada, in what quantities and for what purposes. The new regulations will forbid animal owners to import MIA in finished form from other countries.

Major producer groups continue to

take concrete steps to address the AMR issue. The Canadian Pork Council continues to operate its model quality assurance scheme (CQA), which applies to all its members and represents over 90 per cent of hogs slaughtered in Canada. The Chicken Farmers of Canada has embarked on a comprehensive process to develop and apply strict new rules to ensure prudent use.

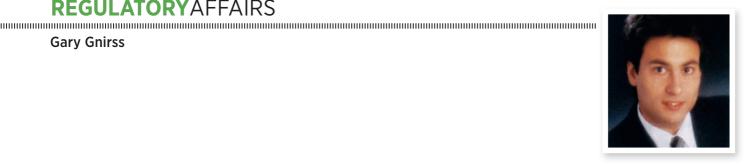
The Canadian Council of Veterinary Registrars and the Canadian Veterinary Medical Association have been slow in responding to the challenge of AMR, but they have now developed a comprehensive plan and a detailed set of recommendations that will be the main topic for their annual meeting this summer. Veterinary medicine is a provincially regulated profession so getting all jurisdictions to co-operate to create a truly national system is not easy, but they seem to have made good progress in the last two years.

The food industry is always happy to respond to market demands for new food attributes, especially when it can charge a premium for them, and even when most of these claimed attributes (like, say, organic) will have no positive effect on safety, taste, quality or sustainability. Proof of prudent use of antibiotics is not one of these. While there is more work to be done, Canadian regulators, producers, processors and retailers have made remarkable strides to respond to the legitimate concern posed by AMR. •

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Gary Gnirss



Supplemented foods

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anadian food regulations are very prescriptive and prohibitive on the matter of fortification with vitamins, mineral and amino acids. Such matters are governed by the Food and Drug Regulations (FDR), which outright prohibits the addition of these nutrients to food, unless it otherwise makes specific provisions to do so. There are only about 27 categories of food that may or must be fortified, with the scope of nutrients limited to a particular food category. Many categories have not been amended since the 1970s or '80s, with the last one being in 1996.

One possible relief from the prohibitive nature of the FDR is the issuance by Health Canada (HC) of a Temporary Marketing Authorization Letter (TMAL). This legitimizes the sale of fortified food that would otherwise be prohibited. Currently the only relief to fortification obstacles is a TMAL or a formal change to the FDR itself.

So why would HC not just fix the regs? Despite HC having been kicking at that can for almost 20 years, it still does not know what it wants to do. A TMAL as a regulatory instrument only provides temporary relief (maybe two to five years) from obstacles in the FDR. A condition of granting a TMAL is that the applicant will be recruiting information and data, so-called information gaps, for HC. This will be used in consideration of possibly developing future regulatory amendments. There is no guarantee that

HC will formalize any changes. Many current TMALs are in this limbo status.

In February 2016 HC formalized "Category Specific Guidance for Temporary Marketing Authorization: Supplemented Food." This new Supplemented Food TMA is open to consider more, like herbal or bioactive ingredients. HC is considering issuing TMALs for foods with unapproved novel ingredients like panax ginseng, Siberian ginseng root extract, L-carnitine and green tea extract. The interesting approach here is the use of a TMAL to provide relief from novel food regulations that would otherwise

Currently the only relief to fortification obstacles is a TMAL or a formal change to the FDR itself.

require a premarket notification to HC establishing the safety of a food. The purpose of a TMA is to provide temporary relief to recruit information in support of regulatory amendments. This means making the food available for consumption, with a reasonable level of assurance that the food is safe. Failing this, the matter is pushed back into the premarket notification arena of a novel food notice.

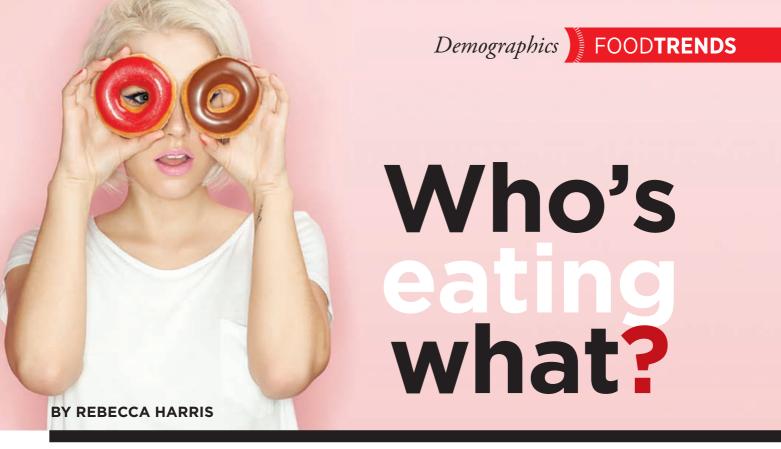
The TMA guidance provided by HC defines a "supplemented food" as a "pre-packaged product that is manufactured, sold or represented as a food, which contains added vitamins, minerals, amino acids, herbal or bioactive ingredients. These ingredients may perform a physiological role beyond the provision of nutritive requirements." It also sets out the scope of food which might be

considered a supplemented food. Foods represented for children younger than four years of age and foods that contain alcohol are among a number that are excluded. Foods that contain unapproved food additives and novel ingredients other than those in Appendix 2 are also excluded. Caffeinated beverages will continue to be subject to their own category specific TMA criteria. The guidance sets out what vitamins and minerals are not acceptable under this TMA. These include folic acid, iron, iodine, nicotinic acid and vitamin K. It also sets two paths for permitted fortification of vitamins and minerals, those with a low and those with a higher potential for adverse health effects.

Many supplemented foods currently under TMALs are set to expire Aug. 31, 2016. HC is proposing to grant an extension until Feb. 22, 2017 to allow manufacturers to reformulate and relabel their products. Food compliant with the new rules will then be eligible for a further extension.

So how will HC regulate supplemented foods in the future? With some predicable speculation, HC may formally define supplemented food in the FDR and incorporate the criteria and labelling of such foods by reference. HC is also thinking of creating a clear way to identify and distinguish supplemented food. What is perhaps the most predicable is that Canada will not see any formalized amendments to supplemented food anytime soon.

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he late American chef and food writer James Beard once said, "Food is our common ground, a universal language." While we all speak the same language, each generation has distinct needs and wants when it comes to food and beverage choices. From Gen We's focus on health and organics, to seniors' desire for something sweet after meals, Food in Canada looks at the eating habits and food demands of today's generational cohorts.

Gen We/Gen Z

While millennials often get the most attention from marketers, a new consumer force is emerging: the youngsters born after millennials. "They're going to define the future of food," says Therese Caruso, managing director of Global Strategy and Insights at Zeno Group, a global communications firm.

Zeno Group divides today's post-millennials into two groups: Gen We (14 to 20) and Generation Z (21 to 25). "We know millennials are the foodie generation, but Gen Z and Gen We are even more knowledgeable about food," says Caruso. "They love food, but they're uber-focused on ingredients and the health aspects of food. No other generation has looked at food labels like this generation."

In fact, Zeno Group's latest global study, The Human Project, found that 78 per cent of Canadian youth read food labels. For Gen We, what matters most when reading a food label is organic (46 per cent), followed by free of ingredients they're allergic to (43 per cent) and ethically raised (43 per cent).

On the beverage side, Gen We is looking for environmentally friendly products/production (41 per cent), whereas millennials are looking for natural products (47 per cent). "For Gen We, 'natural' doesn't mean anything," says Caruso. "They want more than the word natural. They want to know what natural means."

When it comes to marketing, Caruso says engagement is big with today's young consumers. "It's about 'how is this food going to help give me an experience, what does the package look like and how do we serve it and [enjoy it] with friends?" says Caruso. "Food has to be nutritious, it has to be fun and experiential, and it has to bring people together."

Millennials

A large and powerful consumer group, millennials (born between 1976 and 1995) represent 23 per cent of the Canadian population. They're passionate about food, have adventurous tastes and place a big emphasis on health.

According to Nielsen's 2015 Global Health & Wellness survey, 33 per cent of millennials (21 to 34) think health attributes are very important, and 29 per cent are very willing to pay a premium for healthy products. However, millennials are also concerned with time and portability. For example, a Mintel survey found that Canadian millennials are more likely than any other cohort to say there's never enough time for lunch — 38 per cent of those 18 to 24 and 39 per cent of those 25 to 34.

"Interestingly, millennials are also more likely to agree that restaurants generally offer better quality compared to food they bring from home," says Joel Gregoire, senior food and drink analyst at Mintel. "If you're a manufacturer, the question becomes:



how do you look at what foodservice has done and provide the same quality and convenience?"

To cater to millennials who claim they don't have time for lunch, Gregoire says food manufacturers should provide on-hand meal solutions that are easily accessible.

In Mintel's lunchtime survey, 30 per cent of those 18 to 34 said they would be interested in pre-packaged foods typically eaten at restaurants (such as chicken sandwiches or pizza); 35 per cent said they would be interested in pre-packaged salad kits that you assemble just before eating; 29 per cent expressed interest in pre-packaged sandwich kits; and 29 per cent expressed interest in portable, refrigerated ethnic food options such as sushi and curries.

Gregoire also notes that millennials show a higher interest in new and different flavours than other generational cohorts. "If you're a food manufacturer, you can really explore flavours with this group," he says.

One manufacturer that's successfully marrying interesting flavours with portability is Vancouver-based Happy Planet. Its latest line of Grab & Go single-serve soups come in microwavable containers in five globally inspired flavours, including Thai Coconut and West African Squash & Cashew. "It serves more of a lifestyle demographic, and that is people looking for a healthy on-the-go meal solution. It just so happens that lifestyle is something you see more in the millennials," says Ursula Klein, Marketing manager at Happy Planet. "They're on the go, they're looking for bold flavours and they really see eating as an experience."

On the beverage side, Perrier believes it has the right recipe to win over millennials: portability and cachet. The Nestlé-owned sparkling mineral water brand launched its slim cans in 2013 with three flavours: Natural, Grapefruit and Lime. This past March, Perrier added Lemon and L'Orange to the lineup.

"Millennials are looking for something that's on

the go, but they're also looking for something that's trendy," says Jennifer Semley Robert, Marketing manager, International Brands at Nestlé Waters Canada. "We track celebrities, which includes a lot of millennials. They're carrying our products and it becomes an accessory for them."

Generation X

Sometimes called the "baby bust" generation, Generation X is a relatively small cohort. Statistics Canada reports there are about 2.8 million people (eight per cent of the total population in 2011) born between 1966 and 1971, although many people define Gen X as those born between the mid-'60s to early '80s.

Because of its small size, Generation X is largely overlooked by marketers. Mintel's Gregoire, a Gen Xer himself, says, "No one is marketing to us right now, but we have [significant] spending power. We are in the high spend part of our lives."

In fact, according to Environics Analytics, Gen X has the highest average annual household income in Canada, at \$102,000, compared to \$71,000 for millennials and \$98,000 for baby boomers. Statistics Canada reports that 74 per cent of Gen Xers are employed full-time and 65 per cent are living with children.

One big opportunity for food and beverage manufacturers targeting Gen X is in the area of "free-from" claims, particularly among Gen X parents. According to Mintel's recent Free-From Trends report, Gen Xers are the most likely generation to agree that products with "free-from" claims are healthier to eat or drink (63 per cent).

Parents (including millennials) with children under 18 at home hold much stronger views in support of free-from foods and beverages than non-parents, with 38 per cent of parents agreeing that they are worried how certain ingredients will impact their children's future health. Two thirds (66 per cent) of parents feel better serving free-from products to their children, while another 50 per cent agree it's worth paying more for free-from products, compared to 36 per cent of non-parents.

"We see that parents are more likely to agree that it's worth paying more for free-from claims versus non-parents, and this is highest among 35- to 44-year-olds, which I would classify as the Gen X age group," says Gregoire. "The presence of kids really does have an impact on [their attitudes towards free-from foods]."

At lunchtime, Gen Xers are more interested than millennials in pre-packaged salad kits (38 per cent), but not as interested in portable ethnic food



options (26 per cent), or prepackaged sandwich kits (24 per cent). However, 32 per cent of Gen Xers said they would be interested in lunch kits for children with a focus on nutritious options.

Canadian Gen Xers are also more likely (57 per cent) than millennials (49 per cent) and boomers (43 per cent) to agree that fewer ingredients in a product means it's healthier.

Baby Boomers & The Silent Generation

According to the 2011 Census, 9.6 million Canadians are baby boomers, born between 1946 and 1965. Ipsos Reid breaks them down into groups:

back-end boomers (51 to 59, 16 per cent of the population) and front-end boomers (60 to 68, 11 per cent of the population). The Silent Generation, those 69 and older, comprises seven per cent of the population.

While the trend with younger consumers is to look for fewer and simpler ingredients, "that's not the habit of older consumers," says Kathy Perrotta, vice-president at Ipsos Reid. When reading the nutrition facts label, they're "more likely to be concerned about things like sodium, sugar, cholesterol, carbohydrates and fibre."

Perrotta notes that baby boomers are also more likely to look for food and beverages that fit with a particular medical condition. "It's less about preference and more about need," she says. "The big opportunity for [manufacturers] is having foods someone needs for a very specific reason, such as heart health or diabetes."

Certainly, there's no shortage of food and beverage products designed to meet boomers' health needs. One example is Ultima Foods' new probiotic drink, Iögo Probio Kefir. A 190-mL bottle of Iögo Probio Kefir contains more than two billion probiotics, which are said to contribute to healthy digestive tract flora. The drink, which comes in mango and strawberry, is also a good source of calcium.

"Healthy aging and healthy living for boomers is definitely a big trend, and we've taken the healthy aspect of the [probiotic] category to the next level," says Simon Small, vice-president of Marketing at Ultima Foods, which is also targeting millennials with the new product.

On the beverage side, consumers 50+ drink more coffee and tea, less milk and a lot of wine, according to Ipsos Reid's "Five"

daily tracking, which captures consumption behaviour and attitudes from more than 20,000 Canadians annually. "A lot of [wine occasions are] positioned to younger consumers, but interestingly, older consumers drink more wine."

Perrotta suggests that marketers can capitalize on the wine-drinking trend by pairing food and wine. For example, an ongoing campaign for PepsiCoowned Miss Vickie's pairs the kettle-chip brand with various wines, showing consumers the perfect recipe for unwinding at home.

Aside from a thirst for wine, older consumers also have a sweet tooth. According to Ipsos, front-end boomers and the Silent Generation over-index for dessert consumption compared to the general population. "For those in the baked goods industry, there's certainly opportunity," says Perrotta. "It seems as consumers age, they look to finish their meal off with something sweet."



Carol Neshevich

Jack of all foods

The versatile iackfruit is becoming increasingly popular, especially as a healthy highfibre meat alternative at the centre of the plate

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ackfruit may be a fruit, but it's frequently doubling as a meat alternative these days, and it's becoming more popular in North America as people discover its many benefits. "It's a miracle crop," gushes Annie Ryu, who first discovered jackfruit when travelling to India in 2011. She was so impressed with its potential that when she returned to the U.S., she decided to start The Jackfruit Company, now a successful supplier of jackfruit products.

What is jackfruit?

Grown primarily in South and Southeast Asia, jackfruit is a very large tree-borne fruit, with some jackfruits weighing as much as 100 lbs. While it's long been a familiar food item in places like India, it's fairly new to most North Americans.

There are so many uses for jackfruit," says Ryu. "Of course, our favourite is to use the young jackfruit as a meat alternative." While using a fruit as a meat substitute sounds strange, Ryu explains that the unripe jackfruit doesn't taste like your typical fruit. "There's actually no sugar in a young jackfruit, so it's not sweet at all," she says. "It has a very neutral flavour, so you cook it with your favourite spices, seasonings, sauces, and it soaks up that flavour really well."

Because of its meat-like texture and that ability to soak up flavour, the unripe jackfruit is quickly becoming a favourite



among vegans and vegetarians as a meat substitute — it was recently featured on the website for the People for Ethical Treatment of Animals (PETA), for instance as well as among people who simply want to cut back on their meat intake.

As for ripe jackfruit, which is sweet, it can be eaten raw (like any typical fruit), and it can be used to make jams or as an ingredient in desserts, such as cake or custard. The seeds of a ripe jackfruit are also edible.

What are the benefits of jackfruit?

From a dietary perspective, "jackfruit is an excellent source of fibre," says Ryu, who notes that using jackfruit as a "centre-of-plate" option is a great way to meet your daily fibre quotient, which many North Americans fall short of each day. While admittedly not high in protein, Ryu notes that a high-protein side dish (such as beans) can be served alongside it to boost the protein factor in a meal where jackfruit is the main course. Jackfruit is also low in calories. It's free of fat, sugar and cholesterol, and it's rich in potassium, calcium and iron.

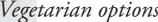
From a sustainability perspective, jackfruit offers numerous benefits as well. The jackfruit tree is hardy, droughtresistant and doesn't need to be replanted each year. Each tree typically yields a large amount of fruit. So as climate change starts to threaten food supply in certain

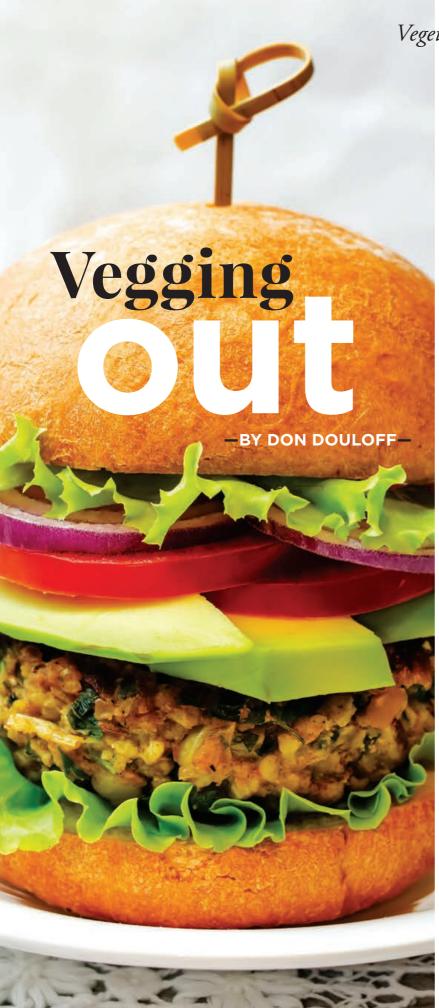
parts of the world, researchers are taking a much closer look at jackfruit. "It's just a really unique, special crop," says Ryu.

How are people eating jackfruit?

Right now in North America, we're hearing a great deal about unripe jackfruit being positioned as a "centreof-plate" meat substitute. One idea that's frequently shared on the Internet is using jackfruit as a sort of barbecued "pulled pork," for example, which can be put in sandwiches or used as a pizza topping. Ryu adds that it's often used in place of braised beef in a stew, or as the "meat" in a chili. It's also becoming more popular as a meat-like filling for tacos, quesadillas or burritos. The Jackfruit Company sells packaged pre-cooked jackfruit in flavours such as BBQ, Tex-Mex, Teriyaki and Curry, which can be heated up and added to a variety of recipes.

According to Ryu, while jackfruit is gaining steam in the retail market, it's still not very common as a restaurant menu item. She hopes that by spreading the word and increasing awareness about jackfruit, this will soon change. "It's just something that can add value to everyone's diet," she says. "It's a really nutritious food that's good for you, and good for the world."





For consumers seeking vegetarian and meat-replacement options, a wide variety of packaged, readyto-eat choices, spanning an array of global cuisines, awaits

here was a time when consumers seeking packaged, ready-to-eat vegetarian meals had precious few options (think pallid veggie burgers and grey, spongy veggie loaf). But that has changed dramatically, as manufacturers have upped their game and now offer a wide array of frozen, RTE options catering to the growing market for plant-based choices.

"We're seeing strong demand across our packaged vegan and vegetarian meal categories," says Ryan Dennis, director of Communications at Nature's Emporium, a Toronto-area mini-chain of healthfood stores. "There is growing awareness and interest amongst our customer base, both due to the recognized potential health benefits of skewing toward a plant-based diet, and the environmental benefits of consuming plant-based foods. This is driving interest in these foods not just amongst vegans and vegetarians, but increasingly amongst traditional meat-eating individuals who are embracing trends like meatless Mondays and assuming a 'flexitarian' (or more part-time vegetarian) approach."

According to the executive summary of a report, Ready and Prepared Meals, produced by market-research firm Mintel, 86 per cent of Canadians ate one or more frozen RTE meal in the six months leading up to March 2015, and 55 per cent of Canadians said "RTE meals allow them to try different foods and flavours," with 53 per cent "agreeing that ethnicinspired RTE meal options are more adventurous."

Indeed, consumers looking to explore global cuisines have much to choose from — Indian, for example. Vij's frozen entrées, the retail offshoot



of Vancouver-based Vij's Group of Companies, which made its name with several influential Vancouver-area Indian restaurants, is now available in 900 stores. Culled from the company's restaurant menus, the line includes scratch-made, kettle-cooked Curried Chickpeas; Saag & Paneer (spinach with cottage cheese); Coconut & Ginger Curried Green Beans; Punjabi Daal (lentils); and Black Chickpea & Ginger Curry. Sales of the retail line have been growing an average of 18 to 20 per cent annually, says company CEO Vikram Vij.

Burnaby, B.C.-based Indianlife produces a line of frozen vegetarian or vegan frozen meals that can include chutneys, rice and flatbreads. Options include Bangalore Beans — Kidney Bean Curry, and Vegetable Korma with white and wild rice and naan. The newest additions to the entrée line are Shahi Paneer (green peas and cubes of paneer cheese with brown basmati rice) and Palak Paneer (paneer cheese in spinach sauce with basmati white rice). Adding to those are Indianlife's Masala Wrap with Chickpea & Wild Rice, and Naan Wrap with Kidney Beans & Brown Rice. There's also Metro supermarket's Irresistibles Chana Masala. "The vegan and vegetarian categories of our private brands business (Irresistibles and Selection) is definitely growing," says a Metro spokesman.

But RTE's globe-hopping ways aren't confined to India. Mexican vegetarian entrées, for instance, are well represented in the freezer section. Amy's, for instance, offers Black Bean Burrito, and

Enchilada with Spanish Rice & Beans and, in the Light & Lean line, Bean & Cheese Burrito. Glutenfreeda serves up gluten-free burritos (dairy-free vegetarian, and vegetarian bean and cheese). And from Burlington, Ont.-based 50 Pesos, there's Black Bean Quesadilla.

Representing Asian influences are frozen meals such as Irresistibles Life Smart Vegetable Chow Mein, and Amy's Thai Red Curry (with



jasmine rice and vegetables) and Pad Thai (rice noodles and tofu). Eastern Europe gets its due with Cheemo potato/Cheddar, potato/mushroom and potato/cream cheese/dill perogies; and, from Ontario-based Sarafina Fine Foods, Cabbage Rolls with Quinoa, and Stuffed Peppers with Quinoa.

Italian-themed options, perennially popular with consumers, are an integral part of the RTE universe. Amy's, for example, targets pastaphiles with Tofu Vegetable Lasagna and Spinach Lasagna, while its Bowls line entices rice lovers with its Mushroom Risotto. Sarafina's Italian-inspired offerings include Vegetarian Lasagna and Eggplant Parmesan with Quinoa, while Michelina's counters with Spinach & Ricotta Bake, anchored by rigatoni. Supermarket private labels, too, are getting into the act. Witness Whole Foods' 365 private-label vegetable and vegan lasagnas; Longo's Vegetable Lasagna (with broccoli and rapini) and Cheese and Spinach Pasta Rolls; and Loblaws President's Choice (PC) Blue Menu Roasted Vegetable Lasagna and Fettuccine Alfredo.

And then there's pizza, an entire category unto itself. The selection is dizzying, ranging from traditional pies and flatbreads to vegan and gluten-free creations. In the former category, options include Stone Baked Mediterranean Flatbread and Stone Baked Pizza (five cheese and tomato/cheese/basil) from Longo's private label; Whole Foods' 365 Vegan Pie and Thin-Crust Pizza with Goat Cheese and Pesto; Loblaws PC Thin & Crispy pies (spinach, for example, and in the PC Blue Menu line, spinach with roasted veggies and goat cheese); and from Metro, Life Smart Thin Crust Multigrain with Spinach & Vegetable, and La Pizza Thin Crust Pizza with Raised Edge (Broccoli, Spinach & Kale). Toronto-based Tandoori Oven, which launched its frozen RTE line in October





2015, counts two naan-based pizzas (veggie and cheese, both made with garam masala spiced tomato sauce) in its repertoire.

Gluten-free pizza options ("gluten-free or wheat-free continues to be a driver in interest across all sub-categories," says Dennis) run to Duo Cheese, and Spinach & Feta, pies from Glutino. Covering gluten-free, as well as dairy-free, is Daiya, whose line, made with mozzarella-style shreds, is available in varieties like Spinach & Mushroom; Margherita; and Supreme (with onions, red and green peppers and meatless sausage). Sarafina's gluten-free line includes Spinaci Funghi, on multigrain crust; Quattro Formaggi, on rice crust; and Vegan Pizza, on sweet-potato crust. Sarafina, which launched its gluten-free pizza in 2013, has been growing "on average 60 per cent each year," says vice-president John Daniele.

Another thriving category is vegetarian comfort foods. Featured in that sub-group is Daiya's dairy-free Cheezy Mac (Deluxe Cheddar Style, Deluxe Alfredo Style and Deluxe White Cheddar Style Veggie); Loblaws PC Macaroni and 3 Cheeses; Amy's Rice Mac & Cheese, and Macaroni & Soy; Amy's Vegetable Pot Pie, and Broccoli Pot Pie with Cheddar sauce; and Yves' Veggie Corn Dogs.

Retail freezers also find space for veggie burgers, in all manner of creative offerings, including Loblaws PC Portobello Swiss Vegetarian Burger and SoL Cuisine's Sprouted Quinoa Chia Burger and Sweet Curry Vegetable Burger, along with Spicy Black Bean Sliders. Elsewhere, there's Veggie Chicken Burger, Mushroom Burger and 7 Grain Burger, and Kale and Root Vegetable Patties, from Yves, which commands 59 share points of the total meat alternatives category, including almost 10 share points in the frozen sub-category, according to AC Nielsen figures.

Trending, too, are meat-replacement meals, typically made with soy protein. "We're seeing an overall strong interest in this category, driven by health and environmental concerns, but also encouraged by an increasingly broad selection of innovative products offered by companies like Field Roast, Gardein and Sophie's Kitchen," says Dennis. "It's easier than ever to find convincing meat substitutions, and people are willing to experiment."

Sophie's Kitchen, for instance, makes such seafood-replacement products as vegan crab cakes, breaded vegan scallops and vegan smoked salmon. Gardein meat-replacement meals include Mandarin Crispy Chick'n; Chick'n Sliders; Chipotle Lime Fingers; Breakfast Patties; Meatless Meatloaf; Mini Crabless Cakes; Golden Fishless Filet; Holiday Roast with cranberry and wild rice stuffing; and Savory Stuffed Turk'y. Over at Yves, there's Original Veggie Ground Round.

Tofurky, a U.S. brand of turkey replacement made from a blend of wheat protein and organic tofu, numbers Slow Roasted Chick'n (in Thai basil, sesame garlic and barbecue flavours), hot dogs and sausages in its RTE roster.



Billing itself as The Original Vegetarian Grain Meat, Seattle-based Field Roast's lineup includes Apple Maple Breakfast Sausages; Smokey Forager's Roast brushed with pineapple mustard glaze; and Hazelnut Cranberry Roast en Croute, hazelnut-infused grain meat stuffed with Field Roast sausages, crystallized ginger, cranberries and apples and wrapped in puff pastry.



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Daniel Scholes



Hold the meat

s summer approaches, so do the annual rituals of sweeping off the deck, hanging up the patio lanterns, and firing up the barbecue. And while hamburgers and hot dogs continue to be the go-to "meats" of many backyard barbecuing occasions, there are a growing number of options that are making their way into popular barbecue food culture. Burgers for instance, are no longer synonymous with beef.

Years ago, the concept of meat-free burgers was about as far-fetched as the idea of water sold in a bottle. While recipes for meat-free burgers have been in print since the 1960s, the first commercially sold veggie burger came much later in the early 1980s, and is said to be the brainchild of a natural food restaurateur in London.

Since then, many companies have embraced the trend, offering their own spin on plant-based protein options, as increasingly more consumers have reduced their meat intake. But as more competitors have invaded the ever-growing vegetarian section, it can be overwhelming to pick out a meat-free bun-filler that can live up to our "beefy" expectations of a burger. With that in mind, we recently put four veggie burgers on the grill to see whether they all equally cut the mustard.

Vege-tasters

We recruited 50 females between the ages of 25 and 54 from the Greater Toronto Area to taste and evaluate four brands of frozen meatless burgers procured at local grocery stores. Our testers received a half of each burger served on

a bun. They were first asked to evaluate the appearance and aroma, followed by a series of liking and "just about right" questions on specific aspects of the taste and texture.

Vege-terrific

One of our four brands emerged as the undeniable king of the veggie burgers, scoring significantly higher than the



other three burgers on quality, overall flavour and definite purchase intent. In fact, over half of our taste-testers agreed that this veggie burger was even better than the traditional beef burger! Now we must have full disclosure here, because this winning brand also stood apart for its unique ingredient list, which included cheese and rice, where the others used soy protein as the main ingredient. So the win for this brand came at the expense of both higher sodium and carbs.

Vege-terrible

Unfortunately, the other three veggie burgers in our test did not fare nearly as well, each scoring below all of our benchmark norms for this category. There were no significant differences between them on key indicators of quality, overall liking, or overall flavour. They all equally "under-achieved" and "under-impressed," with most people in agreement that they did not stack up against traditional beef burgers. This was partly driven by taste;

two of them were too strong in smoky flavour while the other lacked any flavour at all; and all three had a noticeable and unpleasant aftertaste. Lack of crispness was a problem for all four of the burgers — perhaps a by-product of the comparatively low fat content of anything meatless. Two of our underachievers also had another big textural problem and were much too chewy.

Beefing up meatless alternatives

With an aging consumer population and growing demand for plant-based processed food options, the future looks bright for the meatless market. In fact, among our testers more than 50 per cent expect to eat more veggie burgers and less beef burgers in the future.

And as free-market forces would dictate, we should definitely expect increased competition for this growing food segment — putting more pressure on food manufacturers to up the ante in the quality of meatless alternatives such as veggie burgers.

Three of the four burgers in our test did not come close to meeting the taste expectations of a veggie burger, and they were light years away from the taste delivery of a traditional hamburger. As we forge ahead with new innovations in meatless alternatives, the keys to success will lie in providing quality flavour and textural delivery that reduces the trade-offs of the move from meat to veg, and not leaving your consumers asking "Where's the beef?"

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.







departments

- **Editorial** 28
- 29 **Barks & Bites** Pet food industry news.
- 36 **Operations** Clayton Steam Generator provides an essential resource for success.
- On the Market 37 Products for pet food processors and consumers.

features

Catering to finicky felines and their

Super-premium food is in demand by today's pet parents.

35 **Producer Profile** Edmonton-based Mountain Dog Food.







Carolyn Cooper



The health care connection

Most pet parents would likely agree that pet ownership brings emotional benefits. And research has revealed real connections between human health and the positive effects of animal companionship, including lower incidence of hypertension, improvements in blood cholesterol, and reduced stress. Now a new study is showing the possible financial savings associated with health care and pet parenthood.

In December 2015 the Human Animal Bond Initiative Foundation (HABRI), a non-profit research and educational organization founded by the American Pet Producers Association, Zoetis and Petco, released The Health Care Cost Savings of Pet Ownership. The study found that there are two areas in which animal ownership contributes to lower total health care spending in the U.S.: fewer physician office visits; and reduced obesity in dog owners who walk their pets frequently.

Based on the number of adult pet owners in the U.S. - 132.8 million, according to the 2015-2016 National Pet Owners Survey by the American Pet Products Association – the researchers found that pet owners visit a doctor's office an average of 0.6 fewer times per year. That research is backed by studies from Germany and Australia that show even greater gaps between non-pet owners and pet owners when it comes to physician visits (11 per cent lower in Australia, for instance).

The report also revealed that among dog owners who walk their pets at least five times per week, the incidence of obesity was five per cent lower than among non-pet owners. The result is a savings of US\$419 million per year in obesity-related health care spending. Taken together these two factors represent US\$11.8 billion annually in health care cost savings, say the researchers, who note, "Because this analysis is limited and conservative, total health care cost savings associated with pet ownership is likely to be even greater."

CCooper@foodincanada.com



Insects in animal feed?

Dog café opens in LA

cat-lovers head to these cafés to

sip on a coffee or tea and play

with a cute kitty. But now, we

may be on the verge of a new

Insects are a safe source of protein for animal feed, and a very viable option for the future, according to recent research. In fact, the potential for using insect protein as a source of animal feed for pigs, poultry and fish was described as "huge" at a recent conference organized by PROteINSECT in Brussels, Belgium.

Barks&bites

Pet food industry news





trend: the dog café. The Dog Café LA, recently opened in Los Angeles, is a perfect example. There are about a dozen dogs who have been rescued from around Los Angeles available to pet and play with, all of whom are available

Cat cafés are all the rage in countless cities

around the world these days, as eager

for adoption. Due to health regulations, the dog play area is separate from the café/eating area.

> According to the new café's website, "The Dog Café's mission is to revolutionize dog adoption by reinventing the way people connect with rescues who need homes. The Dog Café offers a comfortable and fun space for humans and dogs to hang out

with each other, away from overcrowded shelters, which can provoke fear and aggression in perfectly adoptable pups."

This food truck has gone to the dogs

With trendy food trucks gaining popularity all over North America, Seattle's Dawn and Ben Ford are making sure our four-legged friends aren't missing out on all the fun.

As owners of The Seattle Barkery, a funky food truck for dogs that opened up in Seattle last summer, the Fords serve up homemade treats for hungry pups - from bacon "pupcakes" and mini cheesy doughnuts, to pumpkin pretzels and peanut butter banana cookies. The truck typically stations itself near Seattle's many dog parks. And as an added bonus, they even create special birthday cakes for dogs at the Barkery.

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BARKS&BITES

Hemp for pups

Vernon, B.C.-based True Leaf Medicine International, a pioneering producer of hemp-based pet nutrition products, has signed an agreement with



Pet Food Experts, Inc., gaining distribution in the United States for the first time. The agreement with Pawtucket, R.I.-based Pet Food Experts means True Leaf Pet Functional Chews will be available to 3,500 independent retail stores in 29 states from Maine to Washington State this spring.

Michael Baker, president and CEO of Pet Food Experts, says he's looking forward to offering this innovative line of treats to customers. "Pet Food Experts is excited to have True Hemp as our new product of choice in the hemp-based functional chew category," he says. "Our customers are constantly demanding innovative new products and True Hemp's lineup of functional chews is a winner and a perfect fit."

INBRIEF

> Humane **Farm Animal** Care. the international non-profit certification organization aiming to improve the lives of millions



of farm animals raised for food, recently announced that Torontobased Open Farm is launching the first ethically sourced dry cat food in the U.S. and Canada to have the Certified Humane Raised and Handled label. Open Farm had previously launched its Certified Humane dog food products in stores across Canada and the U.S. in late 2014 and early 2015.

> Mars Petcare, the global leader in pet food sales and subsidiary of candy bar maker Mars Inc., has purchased Whistle, a startup company that makes smart dog collars to track a pet's location and fitness. According to reports, this acquisition cost more than \$100 million.

- > CAVU Venture Partners has invested \$9.5 million in Austin, Tex.-based Nulo Pet Food, makers of high protein, grain-free premium pet foods. Funds will be used to continue scaling marketing, manufacturing and distribution of **Nulo**'s dog and cat food lines.
- · Oxbow Animal Health, a leader in the care and nutrition of small and exotic animals worldwide, has unveiled new packaging for its flagship Essentials line of fortified



foods. New package highlights include warm imagery that evokes the family farm setting, product specific colour coding, updated feeding and transition charts, and an updated nutrition graphic detailing the components of the ideal small pet diet.



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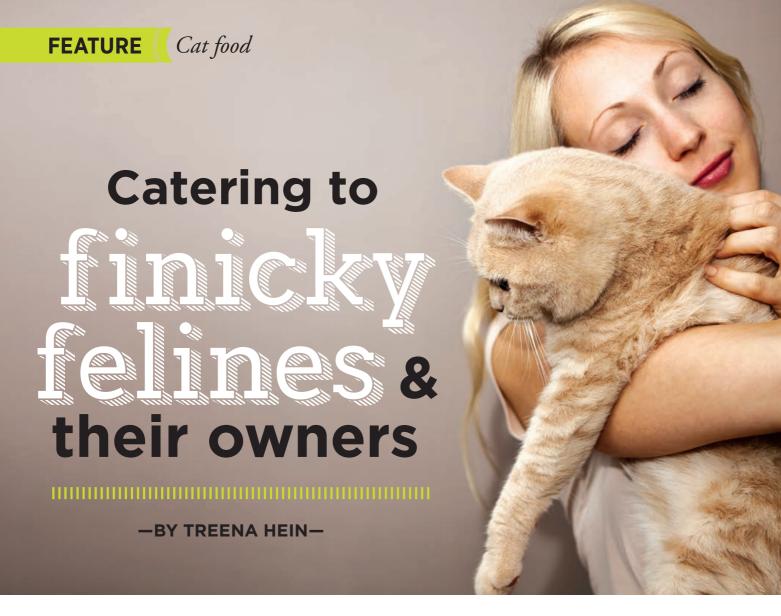
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Super-premium food is in demand by today's **Canadian pet parents**

he title of Euromonitor's 2015 report Premiumisation in the age of Pet Parenthood aptly sums up the main trend in cat food today. "With a growing number of pet owners around the world now referring to them-

selves as pet 'parents,'" the report states, "consumer demand for everything from grain-free and frozen pet food to such products as licensed clothing and smartphone-controlled electronic toys is exhibiting strong growth." And with this growth of "pet parenthood" thinking comes a rising demand for pet food that more closely resembles our own. "The gap between human and pet food continues to narrow," concludes the report, "with a growing number of pet food offerings marketed as grain-free, all-natural, raw or containing superfood ingredients."

Of course, super-premium ingredients cost more, but more of us are willing to shell out to ensure our cats have the longest and healthiest life possible. "Much like in human food, there is a consumer who values quality and who is willing to pay more to ensure they are purchasing quality," notes Dr. Jennifer Adolphe, senior nutritionist at Petcurean in Chilliwack, B.C. Matt Wilson, sales and marketing manager at FirstMate Pet Foods in North Vancouver, makes no apologies about their high-end raw materials: "There is no question that the source and quality of our ingredients increases the cost of our products, but it also has positive impacts on the performance."

It comes as a surprise, however, to discover the premium nature of today's cat food ingredients encompasses environmental sustainability and even animal welfare concerns. "The use of ethically sourced ingredients is important to our team and customers," notes Wilson. "Our company uses free-run chicken and turkey, as well as wild-caught salmon, tuna and herring from sustainable fisheries. Our lamb is free-range and grass-fed without the addition of hormones or antibiotics."







Champion Pet Foods in Edmonton is another cat food manufacturer that sources premium raw materials with minimal environmental impact. "We focus on fresh, local ingredients raised in a sustainable and responsible manner by people we know and trust," explains senior communications specialist Liz Hulley. "Our foods are raised hormone-, antibiotic- and preservative-free." Fresh and local is a big focus. "Just as people are interested in the popular 'farm to table' concept," says Hulley, "we too practice the 'farm to kitchen' principle with ingredients arriving at our kitchen in one to three days, and go from kitchen to kibble within one to two days. In our Canadian kitchens alone, we deal with 100,000 kg of fresh ingredients each day."

Beyond premium protein like fish, lamb, duck and poultry, premium functional ingredients are increasingly being included in cat food for their specific health-boosting benefits. Wilson says FirstMate was one of the first to introduce blueberries, a natural source of antioxidants, to both dog and cat food products. "Since that introduction, it has become an assumption in many cases that the product will contain a good source of antioxidants," he notes. These sources include cranberries, apples, pomegranates and green tea.

Adolphe at Petcurean notes that the specific functional ingredients most important to cat owners are based on the individual needs of each cat. "Some of the functional ingredients that appear to be the most popular are prebiotics and probiotics to support digestive health," she says, "fruits and veggies as a rich source of antioxidants, and coconut oil as a source of medium chain triglycerides." Other functional ingredients being included in cat food formulas include turmeric (shown to promote circulation and decrease inflammation), licorice root (which also decreases inflammation and stimulates the immune system) and ginger, fennel and peppermint (general digestive support). Champion Pet Foods is among the companies which are adding low-glycemic vegetables and fruits such as whole pumpkin and butternut squash to their cat food blends. As they are digested, these natural ingredients enter the blood stream slowly, promoting stable blood sugar levels and reducing the potential for fat storage. None of the companies report any palatability issues with any functional ingredients.

Champion Pet Foods has trademarked the term "Biologically Appropriate" to describe their cat (and dog) foods. "This means they mirror the freshness and variety of meats that cats would naturally hunt in the wild and are evolved to eat," Hulley explains. "In nature, wildcats derive their nutritional needs by consuming whole prey animals. Muscle meat provides life-giving protein and fat while organs are densely packed with virtually every nutrient a cat or kitten needs, including essential amino acids, fatty acids, vitamins and minerals." Organs such as kidney, heart, liver and tripe, she notes, are loaded with heavy doses of B vitamins, minerals like phosphorus, iron, magnesium and iodine, and important fat-soluble vitamins like A, D, E and K. Bone and cartilage

In nature, wildcats derive their nutritional needs by consuming whole prey animals. 11

provide minerals such as calcium and phosphorus. "Our diets mimic the whole prey model, incorporating meats, organs and cartilage in ratios that mirror Mother Nature," Hulley states. "This means essential nutrients are drawn from the ingredients naturally, dramatically reducing the need to add synthetic vitamins or mineral supplements to our foods."

Adolphe, however, believes that the term biologically appropriate does not have a specific definition, nor is there any scientific evidence that feeding cats sinew, cartilage, organs and bone meal provides superior nutrition. "Cats are obligate carnivores and as such require a higher level of protein," she says. "There is a trend toward using higher levels of fresh meat and species-specific meat meals in order to fulfill this requirement." Wilson believes that "most ingredients used in pet foods will contain the organ meat, which is often where the biologically appropriate term has developed."

The use of some grains in cat food is common within the industry, and opinions differ about how much grain — and what type of grain — should be included in formulations. Wilson notes that there are many cat food products that are free of specific grains



like corn. These can be "a great quality and often well-priced product" for cat owners, he says. The firm's FirstMate Classic cat food is free of corn and wheat.

Hulley notes that while cats, being obligate carnivores, have no nutritional requirement for carbohydrates (which grains contain), the manufacture of dry extruded cat food requires a certain amount of carbohydrate to help hold the kibble together. And she believes it's important for cat owners to understand that a pet food that's technically grain-free can be made with large quantities of dried fruits and vegetables, many with high glycemic numbers. In addition, Hulley says "grains such as rice, potato and tapioca cause blood glucose to rise, resulting in increased fat storage which can lead to obesity and diabetes. We limit our carbohydrates to 25 per cent, unlike many conventional cat foods than often exceed 50 per cent."

Adolphe explains that with the increased incidence of diabetes in cats, many owners are choosing lower carbohydrate foods to help stabilize blood glucose levels. "Canned foods are more conducive to having a lower carbohydrate content than kibble," she adds, "because the carbohydrate is not needed for structural purposes. Our GO! paté canned recipes for cats are low in carbohydrates and in many cases have been reported to result in improved blood glucose control."

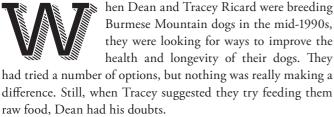
There are those who believe increased rates of obesity and diabetes in ourselves and our cats is a sign that pet parenthood is being taken too far. No matter how healthy the food we feed ourselves and our cats, moderation would seem to be key.

COMPANYPROFILE

Making mountains out of

The owners of Edmonton's Mountain Dog Food have seen the market for raw pet food grow immensely since they started their business more than 15 years ago

BY CAROL NESHEVICH

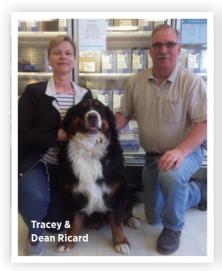


"I was as skeptical as anyone at the time, and remained so - until we started seeing results from that process and an improvement in our dogs," says Dean Ricard. Those improvements included better dental hygiene, improvements in their coats and their stools, bigger litter sizes, and simply improved overall health in general. "So we started making it for our own dogs. This was probably around 1997. So for about two to three years we were feeding the dogs in our kennel (about eight or 10 dogs) our own raw frozen pet food."

Then, as the puppies they bred would leave for their new homes, the puppies' new owners "would ask us what we were feeding the dogs, and we'd show them, and then they'd go home and try it — but usually they decided it was too much work," explains Ricard. "So they would say, 'Well, you're making so much, why don't you just make a little more and we'll buy it from you?' And that's how we started the business."

The business he's talking about is Edmonton-based Mountain Dog Food Inc., which the Ricards started in 2000. The company manufactures raw frozen pet food, consisting primarily of ground-up raw meat, with some products that are also mixed with vegetables. While raw pet food in general is becoming an increasingly popular trend these days, 16 years ago it was much less well known. "We were one of maybe three companies in Canada [producing raw pet food] when we first started," says Ricard. "We not only built the company, we also built the market as we went along."

The challenges in building the business, he says, were many.







"The first challenge was trying to figure out how to make the product efficiently and get it packaged in a way that would be presentable to the consumer," Ricard explains. "Then we got into issues with developing people in the veterinary community who would support what we were doing. And going forward, we started focusing on safety of production and developing GMPs for the plant, and getting inspections and certifications for our process."

But the company has managed to meet its challenges successfully, and today ships approximately three million pounds of pet food a year to retailers across Canada. It currently offers more than 20 different products for both dogs and cats, ranging from a very simple straight chicken product, to more complex mixes, such as Turkey Veggie and Fruit (turkey with bone in, carrots, celery, apple, yam and alfalfa) or Ascension Beef (beef, chicken with bone in, carrots, celery, beef heart, beef kidney, beef liver, kelp and supplements). Ricard says their most popular offerings are by far the poultry-based products. "The chicken and turkey products represent probably 80 per cent of our business," he explains.

The Ricards are always working on new product ideas, and have recently done a "soft launch" for a new product line/brand called Vitaprey, a vitamin-enhanced raw pet food. They're ironing out the production issues for Vitaprey through the soft launch right now, and will officially launch it later this year.

When it comes to business philosophy, Ricard says the company focuses on both quality and affordability. "We want to produce a quality product and sell it at a price that people can afford," says Ricard. And as for consumer feedback, it's been "pretty much positive all the way along," he adds, noting that word-of-mouth reviews are crucial to a smaller business like theirs. "We built our business on word of mouth; we don't have a huge advertising budget to go out and market our products, so we rely on our customers to support us and build our business. I'd say it's worked quite well over the years."

Boiler is nothing to bark about

Clayton Steam Generator provides essential resource for success





lmira, Ont. — For humans it's home of the world's largest single day maple syrup festival. Even though our cats and dogs can't participate, there's something else that comes out of this community

our furry companions can enjoy just as much — premium cat and dog food made by Elmira Pet Products. Elmira Pet Products is Canada's largest producer of private-label dry pet food, with roots going back as far as 1923. This pet food company produces quality food, which is sold across North America and in 38 countries around the world.

Being the largest private-label dry pet food company in Canada, there is a heavy demand on the manufacturing company, and need for quality product. Because of this, all of Elmira Pet Product's equipment must be functioning at optimal output levels. So in 2013, when their steam boiler was beginning to fail, it was apparent that the company would require a new boiler to maintain consistent and efficient production.

"We require a well-functioning boiler for our needs to produce our pet food products so that we can supply our customers with a top of the line product," explains Ray Admanski, Elmira Pet Products Chief Operating Engineer.

Many factors would need to be taken into account for Elmira Pet Products when choosing a new boiler. Factors such as reliability, blowdown, efficiency, steam quality, life cycle costs and service quality were all considered. "We started a search on what boiler size was going to be required including horsepower and output (lbs/hour). So after a lengthy process we decided that the Clayton Steam Generator SF200 was going to be best suited to our needs," recalls Admanski.

Because Clayton Generators are compact and durable they can be placed almost anywhere, with little to no hazard that other boilers might have. They have a small footprint, have a blowdown rate of one tenth of that of conventional boilers, and are virtually indestructible.

In February 2014, after an easy installation of a 200-bhp, 150-psi high pressure steam generator, the company couldn't be happier. "The quality and ease of use from our Clayton boiler couldn't be better," says Admanski. "Our old boiler couldn't compete with Clayton, even when it was new, and after it became ineffective and essentially unusable, this was a great advance for us. In the future, when needed, we wouldn't think twice about acquiring another Clayton Steam Generator."



Lickable purées

Ciao Cat Treats offers Churu chicken and tuna purées that are uniquely packaged in lickable tubes, like yogurt for kids. These lickable treats for cats are made with real deep-sea tuna or farm-raised chicken. Available in five delectable varieties, Churu Purées are high in the moisture felines need for good health. Simply tear open a tube and give it a little squeeze to feed these grain-free, preservative-free treats by hand. You can also pour them into a bowl or use as a tasty topper on wet or dry food. www.inabaciao.com



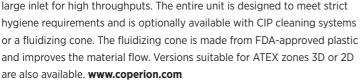
Probiotic protein

Natural pet treat company Raven's Way has just released its latest creation: natural freeze-dried chicken breast with probiotics. The freeze-drying process locks in valuable nutrients and protein without adding chemicals, preservatives, or unnecessary

fillers. Through the freeze-drying process, Raven's Way has been able to combine the advantages of raw whole protein ingredients with the digestive benefits of probiotics. www.ravenswaycompany.com

Keeping it clean

Ideal for pet food production, Coperion K-Tron's Bag Dump Station with integrated dust hood is specifically designed to maintain a clean, dust-controlled process environment. This bag dump station is complemented by a Coperion ZXD 200 rotary valve with FXS (Full Access System) for optimal chamber emptying, featuring a specially designed blow-through channel, perfect for poorly flowing products, and an especially



Pet food packaging efficiency

The SP1 Series Automatic Film Splicer from Butler Automatic is ideally suited towards pet food packaging applications. The splicer increases efficiency in packaging operations by eliminating the packaging line downtime caused by manual film roll changes. With a simple mechanical design and highquality manufacture, the SP1 promises long-term, trouble-free performance. The device senses the diameter of the expiring roll of film and automatically splices the end of each expiring roll onto the new roll, and is capable of running at speeds of up to 600 ft. per minute. www.butlerautomatic.com

Powerful processing

With recent improvements to Eriez's line of metal detection and magnetic separation equipment, the company now offers powerful systems for pet food processing applications. Eriez's state-of-the-art metal detection and magnetic separation equipment can be implemented in various stages throughout pet food processing to identify and eliminate metal contamination. Specific Eriez equipment used in pet food processing applications includes Xtreme Metal Detectors, Drums in Housing, Hump Magnets, Grate Magnets, Deep Reach Magnets, and Vibratory Feeders and Conveyors. Eriez experts provide free plant audits and work with customers to gain a thorough understanding of their toughest processing challenges. www.eriez.com

Packaging perfection

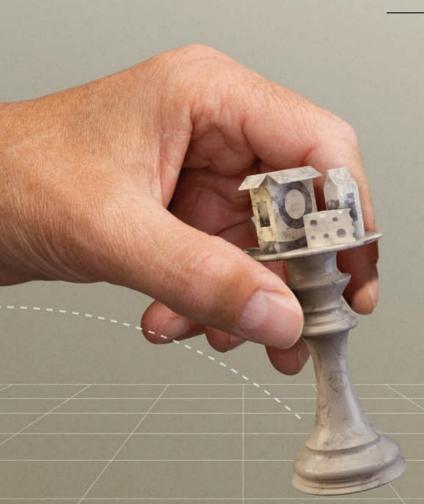
Mondi's FlexZiBox Side Pour pouch, Square Bag, FlexZibox Flat Bottom Bag, and small and large spouted pouches are all ideal pet food packaging solutions. The FlexZiBox Side Pour pouch, for instance, features an integrated handle in the bag's side gusset that makes the bag comfortable to carry and gives users greater control and accuracy when pouring. The bag has a perforated area at the top for easy opening, and its side-gusset closure allows the bag to be re-



closed after use. And the Square Bag, which is constructed of advanced barrier films in multiple layers, packages up to 10 lbs. of pet food. Meanwhile, Mondi's re-closable FlexZibox Flat Bottom Bag provides filling advantages for packagers of pet food, while its specially designed flat base delivers enhanced stability and promotional impact on store shelves. www.mondigroup.com



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Growth strategies for Ontario processors

nce again, MNP was proud to take part in the 2016 Ontario Regional Roundtable with Food and Beverage Ontario and Food in Canada. This year's roundtable was very insightful, with participants from multiple industry categories sharing their experiences and ideas surrounding the growth, challenges and opportunities occurring in the food and beverage space.

As you know, growth in our industry is happening on both a national and global level. Niche markets have created a wealth of opportunity for companies of all sizes in both the food and beverage markets. Premium and gourmet products, along with ethnic food choices, snacking alternatives and health and wellness options, are all rapidly growing trends. On the beverage side, premium, unique and variety are the current buzzwords, as consumers relinquish brand loyalty in exchange for new taste experiences.

Organizational transparency (both in products and supply chain) and personal engagement have also become increasingly important to consumers, which has in turn made the consumer an integral partner in driving growth and new opportunities in both the food and beverage markets. They want to connect with the product — on a lifestyle basis or otherwise — and we have to work harder to make that happen. On that note, building and maintaining trusted partnerships with supply chain associates will bolster cross-organizational growth in part through cost effectiveness. Essentially, together we can achieve higher levels of success.

Driven by consumers' desire for innovation and variety, Canadian companies are evolving to become more agile in order to respond to expanded consumer preferences. While many Canadians are willing to spend more for new, unique products, value continues to be an important consideration in

today's economy. For this reason, food and beverage processors need to have a relentless focus on increasing productivity and process innovation in order to stay in the game — especially on a global scale.

A positive takeaway from the discussion, was that through strategic planning, Ontario processors on the whole have experienced significant growth both organically and through acquisition.

As a group we also discussed a number of other challenges facing the industry. While the strong U.S. dollar is making exporting more attractive and providing new opportunities for growth, it can be a double-edged sword in that it also makes it difficult for companies which import products or ingredients from across the border to source cost-competitively. Government regulations continue to be difficult to manoeuvre, especially for businesses working with several different jurisdictions and municipalities. And finally, labour shortages have also caused challenges, though Ontario has not been as significantly affected by this as has Western Canada. We are confident that food and beverage processors will find innovative solutions to overcome the challenges the industry faces.

MNP will continue to support Ontario's food and beverage companies through business and strategic initiatives as they develop and grow their market identities and presence. We are pleased to contribute a voice and platform for discussion alongside the companies who proudly represent Ontario nationally and globally, and we look forward to building a very successful future together.

Glenn Fraser. Partner and National Leader. Food & Beverage Processing, MNP LLP

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CAROLINE COPEMAN

Welcome everybody. Why don't we go around the table and have everyone introduce themselves and their organizations. **CHRIS DOHLE** I'm the co-owner of Gourmet Trading. We're an importer and distributor of food products across Canada.

RORY MCALPINE I'm senior vice-president of Government and Industry Relations for Maple Leaf Foods. And I'm also on Food and Beverage Ontario's Board of Directors. JULIA SELBY DI'm the general manager at Food for Tots. We make more than 19,000 hot meals and snacks a day and we serve children across the Greater Toronto Area in childcare centres and schools.

NICOLE HYNES I'm the founder of Sweetgrass Brewing Company, a small craft beer company, mostly based in Toronto but we're growing across the province.

MICHAEL BARRETT > I'm the president and CEO of Gay Lea Foods. We're Ontario's largest farmer-owned dairy co-operative. And we have a wide expanse of eight plants, mostly situated across Southern Ontario. We do foodservice, co-pack, private label and retail branded products in Ontario and coast-to-coast-to-coast.

VLADO PAVICIC I'm co-owner of Bush Pilot Brewing Company. And I'm also a partner in Roland + Russell importation company that imports all kinds of specialty drinks: single malt whiskies, wine, and craft beer from all over the world.

LILIANA PAVICIC I'm partner in life and business with Vlado. And, as he mentioned, we are founders of Bush Pilot Brewing Company. Right now we're contract brewing and looking to build an actual bricks and mortar facility in the Upper Ottawa Valley. We are available in Ontario, Alberta, soon Saskatchewan and, hopefully, a few other provinces.

GRAEME JEWETT I'm president of Marsan Foods, and I'm one of the owners of this Canadian family business. The company was started by my father in 1970. And I work together in the business with my brother James. We manufacture frozen meals, soups, sauces for retail foodservice and airline throughout North America. **PAUL SPECK** Pi'm president of Henry of Pelham Winery. The winery is owned by myself and my two brothers. We grow about 250 acres of grapes in the Niagara Peninsula. The wines are 100 per cent made from domestic grapes and they're sold right across Canada. We also export to other markets around the world. KARIM KANJI > I'm founder of One World Foods. We do a lot of ethnic foods in the retail space as well as foodservice. Some of our brands that you may recognize are Tandoori Oven or One World Halal. We sell to pretty much all the major retailers and a lot of foodservice. International sales have actually risen over the last 12 to 24 months. There's a growing demand

COPEMAN So the first question is did your business grow in the past year? **KANJI** Yes. Well, we're actually fairly new in the market. We've been three years in the marketplace and it's been perpetual growth. So we've literally moved from our first deal that we signed with Longo's to now being in all of the major retailers across Canada. We're actually putting our footprint in the U.S. right now, and we've just started to grow out into international markets. So from a growth perspective, we're in the right space. Competition is there but I think we do a good job at bringing innovation into the space.

for ethnic food.

SPECK Yes, we did grow. We've been in a growth phase in the last few years. The wines we make are premium wines. And they're in the Vintners

Quality Alliance category, which is a 100-per-cent grown in Ontario category. And that category itself is out-pacing imports, which are our biggest competitors. So the category's out-pacing imports and we're out-pacing the category, so that's good. And wine as a category itself is growing and is stealing share from beer and spirits.

JEWETT > Yes, we did grow in the past year and a lot of it was out of the U.S. We're seeing fairly strong U.S. sales, a lot due to the dollar. But, because we're such a long cycle sell, really, our success in the U.S. started coming a couple of years ago; the margins started coming over the past year. And we are still seeing great opportunities in the U.S. and in Canada, opportunities that caused us to really focus on productivity.

L. PAVICIC We are seeing growth. We have started exporting to Western provinces. We are exploring opportunities in the U.S. as well. Certainly craft beer is still a growing segment. Our other company has also seen some growth and there is definitely a growth in premium wines and spirits.

V. PAVICIC We did actually expect a little bit more with the deregulation of the market in Ontario, with beer finally being sold in supermarkets. On the Bush Pilot Brewing side, we actually focus on complex beers. Most of our beers are really high in ABV, so we have beers that are 14 per cent, which therefore cannot be sold in the supermarkets. So we saw the gates open but then we are held back. So when you're in the business of producing and selling a product that is highly regulated and you have government that is a control board, then certainly there are challenges.

BARRETT Last year Gay Lea Foods had record sales and record profitability. We're six months into this year and we're far out-pacing both budget on top line and bottom line, largely as a result of three strategic acquisitions that we made over the last year. We've got a number

in the hopper as well that we continue to be able to look at. We could probably experience a great deal more growth. We try not to play in the markets that the big three — Saputo, Agropur and Parmalat — play in. We try and compete in the niche markets where we can dominate and renovate the category. But we are in a supply-managed industry and, therefore, our growth is stymied a lot by the supply. Butter and cream are in short supply. I could probably sell at least another 20 or 30 per cent more if I



WE TRY AND COMPETE IN THE NICHE **MARKETS** WHERE WE CAN DOMINATE AND RENOVATE THE CATEGORY."

-Michael Barrett

had product, but that's a bit of an issue for us. And we are highly regulated as a supply-managed system. So there are a lot of things that are happening politically — TPP, CETA, the end of export subsidies in 2020 — that will have some impact on us. But these first six months have been a phenomenal six months. **HYNES** We're still very new — we're two-and-a-half years old. My biggest problem has been supply. I don't have my own factory, I contract. I've moved three times; hopefully, this is my last move. And sales have been very strong. I sell mostly to bars and restaurants, as well as to the LCBO. But I've had to be saying no for the past six months to any new customers. And, hopefully, in two weeks when I have my new product, I won't have to say no anymore and we can continue on our growth trend.

SELBY Yes, at Food for Tots, we have been serving children for 22 years and we are still growing. The childcare field is going through a lot of changes and child nutrition is certainly a hot topic, with ever-changing and evolving guidelines. What we're finding is that demand for different products is changing. As full-day learning was implemented the growth that we saw in childcare was in snack programs, in before-and-afterschool programs. We are also steadily growing our lunch program as new clients come on board.

MCALPINE Well, when you're a publicly traded company the big issue is bottom-line growth. And on that score we have reinvented the business and have done very well in the transformation, which has been a journey of about seven years. But we've turned a major corner and our share price reflects that, which is very satisfying to see. In terms of gross sales, growth is not huge. In fact, we divested to get to the point we are today with certain parts of the business, namely selling Canada Bread about three years ago. But right now the business is very solid. We've finished the transformation and the balance sheet is strong and there's lots of potential for organic growth and growth by acquisition. **DOHLE** We're an importer and

distributor of gourmet foods, all our products are shelf-stable. Our company's been in business since 1990. My business partner and I bought the company three years ago from the previous owners, who had had a nice growth trend and we've continued that trend. We realized when we got in the business that we were quickly looking for more new products. We also recognized that the brands we have are excellent brands and we just had to work harder to go deeper in the market, which is what we've done. And the brands have done really well across Canada. We also had an opportunity for an acquisition a little over a year ago. So our growth has been a combination of organic growth and acquisition. Our product strategy is at the premium end of the product spectrum so it's usually the

highest priced item on the shelf. We carry one brand per category. We don't carry multiple brands so we're very focused.

NORM BEAL > What specific strategies are you implementing within your companies to try and drive some of this growth? **KANJI** We work closely with a lot of the retailers. And one of the gaps that we've identified in the space is the lack of innovation. One benefit of a smaller company like us is that we can be more agile. We're able to come up with new products, new innovation, pretty quickly. We have a whole halal line that has had a significant response from the market, because there's a lack of innovation in that space. The Muslim consumer has had a lot of chicken nuggets, chicken burgers...there haven't been many additional products available. So having the ability to provide products like Montreal smoked meat or mortadella with olives that are halal, or kosher, has been a big advantage for us. We work with multinationals because we don't manufacture ourselves, we co-pack. That also gives you an ability to focus on the front-end versus having to run a back-end shop, which is a significant amount of time, resources and capital.

SPECK We've been on an innovation binge. The wine business has changed over the last 10 or 15 years from a very staid, slow business, with brands that had been in the market for many years. And that market has really excelled over the last 10 years, through consumers changing and younger consumers, and people being much more open to wines from all over the world. Wine has become integrated in people's lives at all ages. And that forces us to be more innovative. We have consumers who are looking for, in some cases, fun packaging. So it's forced us to come up with packaging and brands that are not just Henry of Pelham. We have other brands like Sibling Rivalry and House Wine Co. which are a little more aggressively priced, and which have taste profiles that are made to be bought and drank. So

we've made a number of stylistic, packaging and marketing changes to address new consumers.

JEWETT For the past three to five years we've seen a lot of concentration and consolidation with our customer base, and whether that's been foodservice or family casual dining, there's been dramatic consolidation there. It's happened in quick serve, as well. It's happened in retail and we've been finding that our customers are perhaps getting more sophisticated in the way they buy their products. They're definitely looking for the lowest price, and we've had capacity so we've had a relentless focus on productivity and automation. And, really, that's been our strategy to win the larger RFPs through driving productivity and through automation.

L. PAVICIC Through our import business we identified that there was a change in consumer sophistication, of palates, people wanting to try something different. Globalization, of course, has people curious. But we identified that growing trend and then brought that back into our vision for brewing. And, as my partner mentioned, our beers are premium and we've done some innovative things; we've brought in old Armagnac barrels from the south of France and aged an eisbock in them for eight months or so. That's our 14.5-per-cent alcohol beer. We brought in Calvados barrels from France for another beer. So we're trying to do something that's innovative because we do find consumers are also changing there's not a lot of brand loyalty. They want to experiment. So that's been our strategy.

V. PAVICIC That's right. We constantly have to be inventing and bringing something new, which is not always the easiest thing to do. Even if you have the technical means of doing that you don't want to be just another gimmicky brand that is constantly pitching something provocative. So, for us, it's finding that balance — staying fresh and new, offering something extraordinary, but also staying true to our values, which are about bringing big, extraordinary beers that are there to stay.

BARRETT We face a unique situation in that we can't export. With 299-per-cent tariffs in and out, our growth has to be within Canada. So we've taken the tactic I was sharing earlier. One of the elements over the last couple of years we've looked at is how do we modernize this industry? There are a lot of people in our industry today who look at TPP and see it as disastrous. We're looking at it as an opportunity, and are asking how can we grow our opportunities within that spectrum? Because the dairy sector's not going to be able to be innovative, to use some of your words, without that opportunity to re-invent and design itself. So Gay Lea Foods is talking about modernizing investing and acquisitions. For example, we've opened the co-operative to dairy goat members, which allows us to expand our basket of goods. And we've doubled the sales in goat in a single year, tripled the profitability. There's some real opportunity within that food sector. Fluid milk is a low-margin product, however, there is opportunity in extended shelf life milk, and in goat products. These are markets Gay Lea will participate in.

HYNES As a new company I'm really working on building my brand and connecting with my consumers. The craft beer revolution, as I like to say, is a huge growth opportunity, but it's also a competitive space. So how do you stand out in a very competitive space? What I try to do is to connect with all of my customers. I use social media a lot. It really allows me to have personal relationships, to some extent, with people. And we are on the ground. I have teams that are doing events all the time in small locations. I don't do big beer festivals — I can't afford them, and I really want to engage with the people who are drinking my beer. I didn't go with a necessarily innovative product. I went with a

super delicious golden liquid. I'm also a restaurant owner, and for the past 10 years the number-one product we sell has been golden beers. So we made a golden beer that's super approachable, and is 4.9-per-cent alcohol. It's malt forward vs. hop forward. It's lemony, citrus, honey, it's delicious. It pairs well with food, and it is a young person's beer. But it's also the craft beer your dad's going to want to drink, or your grandfather.

SELBY For us, growth over the last three years has been through growth in snack programs, successful large client RFP proposals, and also there have been a couple competitors that reached the country that were getting old, acquired in many cases through ad hoc acquisitions, and taking a fragmented network of over 50 plants to what is today a network of 19 state-of-the-art plants, that are cost competitive with best-inclass. Getting shareholder alignment to execute that was a challenge, but it was done. It was critical for the health of the business. And it has been successful. But going forward, it's about innovation. It continues to be about process innovation as much as product because you have to be competitive in your cost structure. We have to be constantly driving further into automation and efficiency in the plants.

us, particularly because of our export business. And there has been such a huge growth in imports into the country in our categories. But I guess, in our business overall, we've got any number of ongoing issues around regulations, and shifting labour. We've got a real labour challenge in Western Canada in our plants. We face a shortfall of labour. We've got a challenge in continuing to find cost-competitive sourcing of a lot of different ingredients. But on balance it feels like we've got a real strong innovation environment right now.

SELBY The cost of food, especially fresh fruits and vegetables over the winter months, has been a challenge for us. We have contract pricing in place with our customers, and so a weak U.S. dollar in the winter can be challenging, as we can't immediately react to pricing changes. We can over time, but the budgets of our clients don't change too much either. So we really have to work with our menu, find ways to do things better, and we work closely with our suppliers and vendors to make good choices for our customers and for our business.

HYNES For me, the cost-per-unit is a big deal, and how to get that cost down when you don't have a lot of capital. Because when you buy things in larger quantities, of course, the price comes down. So that's been a big challenge for me as a startup. As a contract brewer finding the right place to manufacture my product has also been really hard.

BARRETT Besides TPP, CETA and all the government regulations that are going on with regards to the dairy industry, we experienced the same challenges with the U.S. dollar, because every piece of equipment you want to buy for innovation is priced in U.S. dollars. So it's been a levelling effect to our investment. Then there's the talent pool. You've got to re-invent and invest in your own talent, which becomes a difficulty. And then there's government regulations — I deal with eight different municipalities,

"WE WILL STAY TRUE TO OUR CURRENT CUSTOMERS AND TO OUR OVERALL PURPOSE, TO ENRICH LIVES."

—Julia Selbv



out to us when they decided to wind down operations. We worked with these competitors to develop a transition plan and go out and meet with their customers. We've been thrilled to onboard many new customers over the last few years and of course, continue to serve our very loyal customers who appreciate our healthy and delicious philosophy. Moving forward, we're certainly considering what our growth options are. We are deciding whether we continue to work within our niche market, with the customers we know and look at new ways to serve them, or do we leverage our operational strengths and pursue some growth opportunities that way. Either way, we will stay true to our current customers and to our overall purpose, to enrich lives.

MCALPINE For Maple Leaf, if I talk strategy looking in the rear-view mirror, it's been fundamentally about cost takeout. It's about taking a set of assets across **DOHLE** At the founding of the company, the previous owners looked for small, artisanal companies out of the U.S. to import into Canada. In the early 1990s there was less gourmet product in Canada, and products were more mainstream. The gourmet or specialty, premium segments, and ethnic segments, have all grown in the last 20 years. And fortunately a lot of our brands are premium, but they also have an aspect on trend. Some of our brands are gluten-free. All of our brands are all-natural. Some of our brands are organic. And then the other strategy that we employed was to focus on selling to the independent stores first and get the product interest there.

COPEMAN What are some of the challenges you've had to growth? **MCALPINE** Well, for us, currency is your friend and your foe. But basically we've had to develop a strategy that can survive in almost any currency reality. On balance it's probably positive for

for instance, and they all have different rules.

JEWETT I certainly agree that it's the layering of all the issues that is going to take us down, eventually. And hydro's the one that scares me the most, especially with the recent public sale. You know, I've seen where hydro costs have gone over the past 10 years and I can see them tripling over the next 10 years. So that's a big worry. On the currency side, we try and have a natural hedge. So, we are a manufacturer, we buy a lot of U.S. ingredients, and we sell to U.S. customers, which is how we try and eliminate or reduce that risk.

KANJI Our challenges have actually been very different and have come as we've evolved. Initially, when we recognized the gap in ethnic, when we went to the retailers, we knew that one of the top strategies was to drive ethnic. And in the meat space, you've got to be federally inspected, and you've got to make sure that you're accessible across Canada. So that was one of the things that we did initially, to align the right suppliers in making sure that we were creating those early partnerships. That was actually not that difficult. But then on the retail side, again, it was about fighting for that shelf space. Our challenge now is making sure that we're set up on the structural side to ensure we can funnel growth, everything from financial resources to physical resources, to actually having the right people onboard and navigating through that market space.

BEAL > Finally, I want to talk about partnerships in terms of how you grow your business. Do you build partnerships to help in your success?

KANJI Absolutely. In our business it's just the way we're structured, it's all about partnerships. Not only from the front end on the retail but, more importantly, on the back end, because as we grow the business we want to be scalable, not just across Canada but across North America and then internationally. So we targeted who the right folks were that we

wanted to be able to work with, and then focused in on those relationships. And it's served us really well. So we play in the beef space, we play the chicken space, we're in other proteins. But the opportunity is much larger and there's a lot of room for us and other companies like



"ONE BENEFIT OF A SMALLER **COMPANY LIKE US IS THAT** WE CAN BE MORE AGILE. —Karim Kanii

us in the space. Because there has been a certain way of thinking about products, and I think that has been fairly narrow. If you look at the global landscape of product selection and availability and what's actually available in the market today, Canada's probably not in the top 10 or top five on the innovative platform, so there's a lot of opportunity here. You see a lot of international companies coming in for import, but the dollar has really taken a toll on that. So it gives companies like us who are local, who are producing everything in Canada, a significant advantage. And I think being able to provide Canadian product to Canadians really drives the value and the support. **SPECK** Well, we look at partnerships starting with the consumer. What are they asking for from us, what do they want and how can we get it to them? And we've also spent a lot of time talking to our suppliers from a manufacturing standpoint because we were spending a lot of money on capital equipment to get as competitive as possible. And the more we engaged with manufacturing suppliers the more we learned how to innovate and get competitive. We learned a lot from our suppliers who pushed us into directions that we weren't even aware of because we had never asked the questions. That was a big

learning curve for us. And at the grower level we've tried to work with the grape growers in a more collegial way. We don't do it as an industry as well as we should. **L. PAVICIC** I think craft beer is all about partnerships. I mean, what other business would let their competitor go in and brew in their facilities and help them bottle? We're business people, we're not brewers ourselves, but we've received so much through our partnerships. I think the lesson is that we do certainly have to maintain and grow new partnerships if we're all going to succeed.

HYNES I think, for me, my most important partnership is the manufacturer who's producing my product. And the second is the logistics company that I work with. They're integral to what I do every single day.

SELBY It's actually a big piece of who we are as a company, it is a value for us; to be a trusted partner, with our customers, first and foremost, as we serve children each day but also with our employees, owners, vendors and the government. Ultimately, we are always working towards our purpose and hold dear the responsibility of providing nourishment to each child we serve. So being trusted partners and working with trusted partners is really key for us. **MCALPINE** Maybe just to come back to the farm-level partnership with the growers. It's easy, in a bigger business context, to forget how important that is, but when you've been through major food safety crises, animal health crises, currency crises, you soon realize everybody is vulnerable to those big shocks. And in meat protein, in livestock, that's the reality. And as we look at our forward agenda on innovation, this whole idea of local or product attributes that start right at the farm level becomes critical to our innovation agenda. So if we don't have a real alignment and a fair contracting system with growers to reward them for those investments, then it just doesn't

work.



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Part 2 of our series on CETA and the **Canadian food industry** looks at the grains and pulses market

-BY ED WHITE-

uch of Canada's grain trade is housed in the towers at Winnipeg's Portage and Main intersection, and in those towers key marketing professionals are examining how CETA, the Canada and European Union (EU) Comprehensive Economic and Trade Agreement, could affect their companies, industries and interests.

From institutions like the Canadian International Grains Institute to companies like Richardson International, and organizations like Pulse Canada and the Canola Council of Canada, CETA seems to offer the potential for more exports. But most see the European market as a tough nut to crack, CETA or no CETA.

"They really don't want to import grain. They want to grow everything themselves. They make it difficult for us," says Richardson International's Terry James, who has decades of experience exporting crops to Europe. "This agreement may help resolve some of those problems, but it's not going to happen overnight."

James has dealt with Europe both as a quality market and as a vexing and undependable market, with large and steady sales of flax suddenly shut down in 2009 by the Triffid crisis, but also seeing premium sales of other crops continuing year after year. "We'll still sell durum to Italy. We'll still sell high-quality wheat to the U.K. We'll still sell to markets from time to time that we can get our spring wheat into," says James.

For pulse growers and marketers the situation has generally been more relaxed than for genetically

PRESENTLY THE EU HITS PULSE INGREDIENTS WITH A 5.1-PER-CENT TARIFF FOR FIBRE, 7.7 PER CENT ON FLOUR, 12.8 PER CENT ON PROTEIN, AND 166 EUROS PER TONNE ON STARCH modified crops, such as canola, or crops that Europeans already produce large amounts of.

Sales of Canadian beans, peas, lentils and soybeans have tended to occur without a lot of problems or challenges, and that's something Pulse Canada wants to preserve, says the organization's market access head, Gord Kurbis.

CETA establishes committees and processes through which phytosanitary, GM, residue and other issues can be dealt with, instead of allowing those issues to quickly escalate into political issues, which can occur today, explains Kurbis. "If committees can be used to address problems before they arise, by harmonizing standards or approaches...then that's great," he says. That might be a key defence for Canadian exporters when dealing with hyper-sensitivity in the EU. "Tolerances and policies generally in the EU that relate to the use of technology in food production and just how satisfied consumers are don't seem to be going the right direction."

The Canadian pulse industry wants to see reductions in tariffs and other costs to processed pulse crop food and ingredients, because right now those face tariffs and restrictions that raw seed shipments don't see. That should occur within CETA.

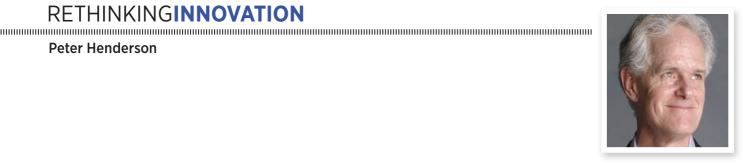
"It's really creating an enabling condition," says Kurbis. "We would like to be in the situation where we're bursting at the seams with respect to valueadded processing here in Canada, and the tariffs really are the only thing holding back the development."

Presently the EU hits pulse ingredients with a 5.1-per-cent tariff for fibre, 7.7 per cent on flour, 12.8 per cent on protein, and 166 euros per tonne on starch. CETA clears away all those tariffs except for the one on starch.

James says his caution in hoping for more access to Europe comes from the multiple risks that arise when facing European regulations, ones that hit flax exports hard. The GM issue is a significant risk because of the present zero tolerance for unapproved varieties, phytosanitary issues can block ships being unloaded, chemical residue limits can be set extremely low, and new concerns like requiring "sustainability certificates" can interrupt the trade flow. "These are all the other things that I see, one after the other, that create added risk and problems into Europe," he notes. "There are a lot of moving parts over there."

But if CETA manages to stop disputes, issues and problems from escalating into the political realm, most of Winnipeg's grain trade will probably find future business with Europe less stressful, if always fraught with doubt.

Peter Henderson



How is **food** evangelism reshaping your corporate strategies?

ood evangelism has become mainstream, now representing close to a quarter of the general population globally. Vocal and passionate food evangelists are influencing consumer behaviour, which is impacting business decisions of consumer-facing brands, and causing dramatic ripple effects throughout supply chains. Accordingly, leaders across the food chain should be exploring the above question within their companies, as well as with their suppliers (supply chain), business customers and possibly competitors.

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To help with this conversation, in January this year communications firm Ketchum released a global consumer research report, which examined feedback from 2,098 food evangelists, including what motivates them and what to expect from their children. Remarkably, this Ketchum study revealed "food evangelists" represent a mass of 24 per cent of the global general population, up 10 per cent over 2013. The report indicates a wide variance in the degree of food evangelism. It is highest in Italy (43 per cent of the general population), followed by mainland China/Shanghai (37 per cent). The low end of the scale includes: Germany (11 per cent) and the



Netherlands (five per cent). Canada was excluded from the study.

The United States is at 14 per cent, up 27 per cent from 2013. Other research for the U.S. market supports this, for instance: 2015 organic sales increased to \$43.3 billion, a 23-per-cent increase vs. 2013, according to the Organic Trade Association; ethical/environmentally friendly packaging claims were on 24.7 per cent of new products in 2015, up from 8.5 per cent in 2009 (Mintel); and non-GMO/GMO-free claims were on 15.7 per cent of new products in 2015, up from 1.9 per cent in 2009.

In Ketchum's words, food evangelists are "a powerful global group who want to impact the way food is raised, packaged and sold, and are committed to sharing their opinions with others." Ketchum's partner and director, Global Food & Beverage Practice, Linda Eatherton, suggests via press release, "Food eVangelists are becoming a mainstream, dominant market force, exacting marked change on the way the food industry operates and communicates, and we predict they will become the 'new normal' among consumers." She goes on to say "While Food eVangelists have a desire to influence others, it's

important to remember that they don't promote a specific agenda. Rather they seek information from multiple sources, listen to varying opinions, and make their own decisions."

As you explore this subject, you may wish to consider various appeals to food evangelists and the general population they influence, including:

- » Adding third-party accreditation/ certification. According to Ketchum research, food evangelists don't trust;
- » Promoting local, provincial and Canadian sourcing, including use of smaller-scale crafted products and suppliers;
- » Of course, making various "free from" claims, such as non-GMO, cage free, free from antibiotics or hormones, no artificial flavours and colours, gluten free, and simplification of ingredient lists; and
- » Increasing transparency including regarding your corporate responsibility

For consumer-facing companies, listening to and engaging with your consumers and end-users, especially food evangelists, will help you uncover new insights and opportunities, and can play a role in cultivating "brand evangelism" (not to be confused with food evangelism) inside and outside your organization.

Your comments and feedback are appreciated, and always welcome.

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



Getting what you've ordered

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Managing food fraud

n Canada the food manufacturing supply chain is becoming more and more complex. Higher costs and competition have pressured companies to find less expensive suppliers with the hopes of increasing their profitability. But as food manufacturers extend their supply chain globally and to more diverse suppliers, their exposure to potential food fraud increases substantially.

It's estimated that food fraud costs the global food industry US\$30 billion to US\$40 billion a year. Food manufacturers in particular are at risk from fraudulent activities related to the quality of the products they source. Examples of fraudulent activities include:

- » Substitution: Passing off one ingredient for another.
- » Concealment: Hiding the real quality of a product.
- » Dilution: Mixing a lower-quality ingredient into a higher-quality ingredient.

If exposed, some fraudulent activities may simply erode customer trust in the quality of a product. But other activities can cause serious food safety issues, such as transmission of foodborne illness, or consumers having allergic reactions to unlisted ingredients.

For a food manufacturer, the consequences of food fraud, regardless of where it occurs in their supply chain, can be catastrophic. And with the



For a food manufacturer, the consequences of food fraud, regardless of where it occurs in their supply chain, can be catastrophic.

prevalence of social media today, a company's reputation can dissolve in minutes. Companies can also face harsh regulatory and legal penalties if found to be at fault or negligent.

So what can food manufacturers do to lessen exposure to food fraud? As a starting point, companies need to think more proactively about food quality and safety. To do this, food manufacturers should:

- » Take responsibility: Given the complex regulatory environment globally, companies should take responsibility for the quality and safety of the products they source and introduce controls to confirm products are as expected.
- » Conduct a self-assessment: Companies should regularly evaluate their organization's exposure to potential food fraud. Identifying gaps and introducing risk mitigation

- activities are important parts of this evaluation.
- » Understand stakeholder requirements: Food manufacturers should identify the food quality and safety requirements of upstream stakeholders to make sure processes are in place to manage compliance.
- » Identify and incorporate best practices: The Government of Canada provides guidance on importing food products, including recommended controls that can help protect organizations from food fraud. Companies should identify and incorporate these controls and other industry best practices within their operations.
- » Use prevention and detection technologies: Companies that are at a high risk of food fraud should consider identifying and implementing technologies to improve the traceability of their products, thus decreasing fraud at all stages of the product life cycle.

Incidences of food fraud may be on the rise, but food manufacturers which understand and manage food fraud risks will be well positioned to guarantee the quality and safety of their products. The trust of their customers, retailers and end consumers depends on it.

Use our free food fraud assessment tool at www.pwc.com/foodfraud to help identify potential risks to your organization.

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RESEARCH CHEFS IN CANADA

News>file

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A taste of summer

McCormick officially welcomes summer with the launch of its annual McCormick Flavour Forecast 2016: Grilling Edition. The trend report looks at the flavours and foods Canadians across the country will be barbecuing this season. "The summer of 2016 will be all about incorporating smoky, spicy, tangy flavours in new ways we've never seen before," says McCormick executive chef Kevan Vetter.

Here are the five key trends McCormick says will have Canadians all fired up this summer:

1. Bold Brazilian Sauces - Brazilian cuisine offers a wide range of signature sauces for skewered meats, from fruity to fiery.



7 Spice Teriyaki Shrimp with Spicy Citrus Yum Yum Sauce

2. Brazen Burger Rubs – Spice rubs are no longer just for steaks or ribs. Rubs add a punch of flavour to burgers, creating a carmelized outer layer when grilled.

- 3. Savoury "Steaks" Grilling is increasingly going beyond meat to include fruit and veggie options. Veggie "steaks" like cabbage can be marinated, grilled and loaded with toppings.
- 4. Heat + Tang + Smoke Spicy combinations will hit the grills this summer, including fresh chilies paired with tangy vinegars and mustards.
- 5. East Meets Grill Canadians are trying zesty Asian marinades and sauces based on sweet, soy and spice.

The Road to The Royal begins

The Royal Agricultural Winter Fair has kicked off its 2016 Road to The Royal series of chef competitions.

The Egg Farmers of Ontario Road to The Royal Chef Challenge will take place at six local fairs and festivals across the province starting this month, and will showcase the talents of local chefs and highlight local ingredients and foods. During each event chefs are challenged to come up with an entrée and dessert using black box ingredients from regional producers.

Winners of the regional competitions will meet during a final round at The Royal in Toronto on Nov. 12.



INBRIEF (

> Seamus Dooley

of The Fairmont Chateau Lake Louise will represent Canada at the 2016 La Chaîne des Rôtisseurs International Jeunes Sommeliers Competition taking place in



Vaduz, Liechtenstein in August.



> This spring Sodexo brought the flavours of the world to Canada with its Global Chef Program. This year the month-long international chef residency saw top Sodexo chefs from 12 countries visiting Sodexo customers in the U.S. and Canada to share culinary techniques and authentic foods. Francisco Layera, a Sodexo executive chef from Chile, visited both St. Francis Xavier University in Antigonish, N.S. and the University of King's College in Halifax.

> A report released by Google in May titled 2016 Food Trends on Google: The Rise of Functional Foods shows that pasta is growing in popularity again. Based on the volume of search queries about food



between January 2014 and January 2016, the survey shows rigatoni, tortellini, penne, fusilli and linguine are on the upswing. Pasta search results as a whole have risen 26 per cent between January 2015 and January 2016.



A PASSION FOR rece druina



L The main objective is to preserve food by removing the moisture so the food doesn't spoil.

BY JOHN PLACKO

became obsessed with the notion of freeze drying the moment I ate what I believed to be "Astronaut" or "Space" ice cream. I believed the folklore that the space program used this as part of the food supply for the astronauts. Well, now I know, this isn't true.

Ice cream has never been sent up as part of the space program food supply. There was vanilla ice cream on the Apollo 7 menu plan, but astronaut Walter Cunningham dismisses any talk about having ice cream in space.

In 2013 Canadian astronaut Chris Hadfield posted a video eating raspberry and blueberry yogurt from a pouch and dispelled the myth that astronauts actually get ice cream for their missions in space. The product is so dry it crumbles and therefore the use of ice cream in a weightless environment would create a huge problem, as any fine crumbs floating around could get into the control panels.

Regardless of whether astronauts have it in space or not I decided to buy myself the world's smallest freeze dryer. It takes four trays, which are 7x14-in. in size, and holds approximately one kilogram per tray. These units are designed for home use but can be used for R&D labs and even restaurants and hotels. A good size freeze dryer is normally \$20,000 to \$30,000, but this unit was just over \$5,000.

The process

Technically the process is known as lyophilization. The process was invented by Arsène d'Arsenal in Paris, France in 1906. The main objective is to preserve food by removing the moisture so the food doesn't spoil.

The first step in the freeze drying process is to place the food on trays and put them into the chamber to freeze the product down to -40°F. This stage of freezing the food can take up to nine hours depending on the size and density of the food. Only high-quality ingredients should be used in a fresh or cooked state.

ACULINARYODYSSEY







The next step in the process is the primary stage of drying. A powerful vacuum is created within the chamber of the unit and heat is applied and moisture from within the food moves from a solid state to a gaseous state, maintaining the structure of the food. The pressure in the chamber is controlled with a partial vacuum and the cold condenser chamber walls become covered with the frozen water (the chamber will defrost at the end of the process and is drained away from the machine). Ninety-five per cent of the water is removed at this stage.

The final stage within the chamber is the secondary drying. This will remove any unfrozen water molecules, since the ice was removed in the primary drying phase. The complete freeze-drying process can take approximately 18 to 36 hours depending on the amount of food in the chamber. The food coming out of the chamber is very light, with a crisp texture, almost the same colour as when it went in, and has an incredible flavour burst, with all the water removed.

Shelf life

Proper freeze-dried storage requires that the food be stored in seven-millimetre Mylar bags with an oxygen absorber sachet placed into the bag before sealing. Most small packs of oxygen absorber sachets are packed with a small pink indicator which shows the pack is free of oxygen.

Proper drying process coupled with vacuum packing in Mylar bags can maintain the integrity of the product for up to 20 to 25 years. While freeze drying removes 98 to 99 per cent of the moisture vs. dehydration which removes 90 to 95 per cent of the moisture, freeze drying is one of the most energy-intensive ways to preserve food, hence the hefty price tag on those small bags of snacks.

This preservation process was a game changer to the medical industry when blood plasma and medicines that normally require refrigeration were freeze dried and shipped to the troops in WWII. Army brass realized that the soldiers couldn't carry cans of food for long journeys, so the process was then used to preserve food for a convenient meal with the addition of water. Freeze-dried foods will usually be ready to eat in less than five minutes. Canned food can be stored safely in hot and humid conditions and so can freeze-dried foods, but at a much reduced weight.

Nutritional content

The vast majority of the vitamins and minerals found in the original food are retained through the freeze dry process, with the exception of vitamins C and E and folic acid. There are many freeze-dried products on the market today, including the berries in breakfast cereal, and vegetable and fruit/berry blends that make it convenient for parents to carry around for their toddlers. My granddaughter, Paisley, absolutely loves freeze-dried fruits and yogurt, and it's a healthy snack.

Stores selling camping and hiking gear will have a selection of entrées, such as chili macaroni with beef, side dishes like fire roasted vegetable blend, and dessert options such as apple crisp or cheesecake bites. With most products you just add water.

The beauty of freeze-dried foods is that they can be free from added sugar or additives. I absolutely love trying different foods to see how they perform - oranges, kiwi fruit, plums, raspberries, strawberries, beets, mango, pineapple, gummy bears just to name a few. Freeze drying avocado and grating it onto a cold appetizer gives you more flavour than you would expect from an avocado. However, my favourite still remains the bite-size scoops of chocolate ice cream.

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Packaging: Much more than a pretty face

ackaging is a huge investment. Jumping into label design without a plan is like baking a cake without a recipe. Packaging mistakes can be costly, resulting in lost sales and expensive redesigns and packaging write-offs.

Optimizing packaging

Following a methodical process for packaging development can deliver a slew of benefits for brand owners:

- » protection of product integrity, longer shelf life and fewer product write-offs:
- » reduced risk of recalls;
- » fewer customer complaints;
- » improved production efficiency and faster time to market:
- » waste reduction:
- » lower labour costs:
- » improved shelf presence and differentiation from competitors; and ultimately
- » increased customer loyalty, sales and

Packaging has three primary functions. It serves as a container to store and transport food from factory to retail shelf and into consumers' homes. As a barrier, it protects food quality and safety from physical, chemical and biological hazards. This is where food science and packaging intersect. And as a "billboard" for communication, packaging is your last chance to convince consumers to choose your product over everyone else's.





Assessing options

A multitude of factors should be considered when developing packaging. Here are the top 10:

1. Product and processing

It starts with the characteristics of the food, food safety requirements and how it's prepared and consumed. Then options are narrowed down according to the manufacturer's processing methods and equipment capabilities.

2. Size

The weight or volume of the finished product also determines the packaging format. The ideal package size is based on regulations, batch and serving sizes, product usage, consumer needs, competitors, price point and in which channels the product is sold.

3. Materials

Ensuring that packaging materials are food grade and meet specifications and performance requirements is essential. Look for manufacturers certified under IFS PACsecure, a packaging material safety and quality standard.

4. Distribution

Depending on the channels through which products are distributed, retailers and foodservice operators have a variety of needs relating to packaging formats, damage susceptibility, handling and waste. Costco, for example, has strict packaging specifications.

5. Branding

Packaging can reinforce a brand's values, identity, attributes and benefits. Align packaging with the brand strategy and

ensure it delivers on the brand promise. For instance, an organic brand may do well to shun plastic packaging.

6. Consumers

Understand target consumer needs and what features and benefits they value and are willing to pay for. A negative experience can drive them to your competitor.

7. Competitors

Scrutinize competitive products to identify advantages and flaws. Although unique packaging is a differentiator, it can confuse consumers if it fails to meet their needs. Testing concepts with the target customer can mitigate risks.

8. Merchandising

It's critical to evaluate how effectively the packaging displays in-store.

9. Sustainability

Environmentally conscious consumers are holding brands accountable for swelling landfills and polluted oceans. So review the material origins, disposal options and recyclability. Laminated pouches, for example, are not recyclable.

10. Cost

Cost often drives the decision, but choosing the cheapest solution can result in bad compromises and cost more in the end. In addition to materials and printing, be sure to factor in transportation, inventory storage, sales volume and potential write-offs.

Packaging is an evolution. As your brand evolves so too should the packaging, to remain relevant to changing consumer demands. With over 50 per cent of purchase decisions made in-store, effective packaging can drive trial, customer loyalty and repeat purchases. •

As a packaged foods consultant, Birgit Blain makes food products more marketable. Contact her at Birgit@BBandAssoc.com

IFT16 Preview

IFT16 takes place in Chicago from July 16 to 19. More than 23,000 food science and technology experts from over 90 countries, representing some of the most prominent organizations in the global food sector, will be in attendance. Will you be there? Food in Canada has assembled a preview of some of the companies that will be displaying their innovative products at IFT16.

Functional ingredients

WTI produces functional ingredients that help you improve your products by inhibiting pathogens, extending shelf-life, reducing sodium content, increasing yields and improving product quality. WTI's product line includes clean label, all-natural antimicrobials and all-natural shelf life extenders. www.wtiinc.com

Flavours of India

Bell Flavors & Fragrances will be presenting global flavours from one of its 2016 Spark trends, "The Well-Traveled Kitchen: India," at this year's IFT, highlighting flavour profiles from savoury to sour, spicy to sweet, with intoxicatingly aromatic boldness and exotic versatility. Visitors can also indulge in Bell's chaat bar, where they can top their Indian snacks with a variety of chutneys and toppings.

www.bellff.com

Customized & innovative

B&D Flavours creates client-specific, innovative flavours. Every client's brand development needs are supported by B&D's flavourists and application specialists, who leverage their strategic market insights and data resources to deliver consumer-preferred products.

www.bdflavours.com

A broad range of colour

Mother Nature supplies the raw materials, while DDW adds its 150 years of expertise. Offering a complete range of natural colourings, DDW gives customers the option to choose an existing hue from its broad portfolio or collaborating with the company's application scientists for a custom blend. On display at IFT will be DDW's Purple Corn Juice Concentrate for Color. EmulsiTech Clear Paprika and Beta-Carotene, and DDW Specialty Dark Powders. www.ddwcolor.com



FCI (First Choice Ingredients) is a manufacturer of natural dairy flavours and concentrates. Looking for gluten-free, non-GMO, organic, kosher or halal dairy ingredients? Come visit their booth at IFT and meet their dairy experts. www.firstchoiceingredients.com

Corn syrup specialists

Grain Processing Corporation (GPC) provides ingredients to the food, beverage and nutritional industries. MALTRIN maltodextrins and corn syrup solids are a primary focus for GPC, with quick-dispersing versions also available. www.grainprocessing.com

Return to real

Kerry is responding to consumer demands for a return to real ingredients. The company offers food, beverage and pharma products that people enjoy and feel better about. www.kerry.com

Gelatin innovation

Nitta Gelatin NA specializes in the production of porcine, bovine and fish gelatins, as well as collagen

peptides. With almost a century

of know-how and a state-of-the-art Technical Center, Nitta Gelatin provides customers with innovative ideas, excellent technical service, and high-quality products. nitta-gelatin.com

On trend

Mizkan America, Inc. is a manufacturer of on-trend, in-demand ingredients. Mizkan produces a wide variety of vinegars, cooking wines, denatured spirits, wine reductions, and wine powders. It also offers a full range of pepper ingredients including chilis, jalapenos, tomatillos and chipotle. www.mizkan.com

Naturally innovative

Since 1989, RFI has been developing and manufacturing innovative natural ingredients, custom blended formulas and turnkey products for the nutritional, dietary supplement, food, functional food and beverage markets. www.rfiingredients.com



Bakery Showcase 2016

The Baking Association of Canada's Bakery Showcase 2016 took place in Mississauga, Ont., from May 1 to May 3. Here are a few highlights from the exhibitors.

Decadent & gluten-free

Featuring Caldic ingredients, Caldic's decadent gluten-free brownie, made with delicious chocolate bits, was layered with crème brulée and chocolate filling, chipotle butter brittle and a grain and seed crumble to create different textural sensations in a cup.

www.caldic.com



Easy interface

McCormick Flavour Solutions unveiled its new McCormick Canada website, www.mccormickflavoursolutions.ca. Designed to meet customers' flavour and ingredient needs, the site's easy interface can be

used to request samples and product information. Customers are encouraged to visit the site often to discover the latest flavour and ingredient trends.

www.mccormickflavoursolutions.ca

Healthy baking

Chemroy's theme for Bakery Showcase 2016 was "Healthy Baking." The company showcased high-protein cookies & dream bars from DuPont Nutrition & Health. and promoted Chemroy's portfolio of functional and specialty ingredients on trend with the latest healthy baking concerns: Digestive Health, Weight Management, Cardiovascular Health and Immune Health (gluten-free solutions). Chemroy also introduced new Bakery Flavour concepts from E.A. Weber Flavours: Pina Colada, Peanut Butter & Jelly and S'mores. www.chemroy.com

Meeting organic demand

Ardent Mills aims to meet the growing customer and consumer demand for organic flour. The company's farmer relationships and milling expertise enable Ardent Mills to deliver quality, consistency, scale and price predictability to organic flour customers.

www.ardentmills.ca/organic



Bakery machinery

Eckert Machines offers a wide array of equipment suitable for bakery applications, from Belt Conveyors and Big Bag Dump Systems, to Flour Cooling, Micro Component Dosing Systems, Mills, Mixers, Pasta Forming Equipment, Pneumatic Transport, Sanitary Belt Conveyors and much more. www.eckertmachines.com

Advertisers' index

BUNGE CANADA	PG. 5
CHRYSLER CANADA	PG. 7
CONTINENTAL INGREDIENTS CANADA	PG. 9
DEALERS INGREDIENTS	PG. 25
DEVILLE TECHNOLOGIES	PG. 30
ERIEZ MAGNETICS	PG. 3
GRANT THORNTON LLP	PG. 1
MIZKAN AMERICA	PG. 3

MNP LLP	PG. 38
MULTIVAC CANADA	PG. 29
PWC LLP	PG. 56
REISER	PG. 31
SEALED AIR	PG. 2
SILLIKER	PG. 14
TRANSPORT MORNEAU	PG. 21
UNIVAR CANADA	PG. 55

Carol Neshevich



GraceKennedy (Ontario) Inc.

(Ontaria) Inc.

Richmond Hill, Ont.

 he history of GraceKennedy stretches way back to 1922. Initially a small company of traders and wharf operators in Jamaica, over the decades it grew into the GraceKennedy Group: a large network of companies located across the Caribbean, North America, Central America and the U.K.

The Canadian arm of the GraceKennedy Group — GraceKennedy (Ontario) Inc. — began in 1984. "The company in the early days was a distributor of many, many different products," says Lucky Lankage, CEO of GraceKennedy (Ontario) Inc., who has been with the company since 1988. "But over the years we decided that we had to focus on our core products and core values, which is mainly bringing Caribbean (food) products to Canadians. We decided to really focus, so we shed a lot of products that didn't fit into our strategy...so that's been our evolution. It's been 32 years now, and we've been having a good ride."



Under the "Grace" brand, which is a household name in Jamaica and throughout much of the Caribbean,

GraceKennedy (Ontario) Inc. sells a variety of Caribbean food products to Canadians from coast to coast. This ranges from syrups, to jerk seasonings and marinades, to canned fish and meats, hot pepper sauces, snacks and more. But the most popular products on their roster, says Lankage, are the coconut products — particularly the Grace Coconut Water. "We are the number-one coconut water in this market in Canada, and we have been for the last five years or so," he says, adding, "We are the coconut experts. Nobody has the range of coconut products that we do." In addition to the popular coconut water, the company also sells coconut milk, coconut oil, coconut vinegar, coconut chips and coconut sugar (a fairly recent addition to the line).

GraceKennedy has also recently made forays into the organic product marketplace, with Organic Coconut Milk, Organic Coconut Oil, Organic Coconut Sugar, Organic Coconut Vinegar and Organic Coconut Flour all hitting the shelves. Lankage says that as a company, they place a high priority on meeting consumer expectations when it comes to the desire for organic options, healthy choices, and the like. "We listen to our consumers. We do very frequent consumer research," he says, noting, for example, that they are reducing salt in some of their products and removing

some additives in response to consumer preferences.

With 51 employees and close to \$50 million in annual sales, GraceKennedy (Ontario) Inc. is consistently growing, and has increased its national distribution reach over the past couple of years. Lankage is proud to point out that Grace-branded products are now available on store shelves at major grocery chains "from St. John's, Nfld. to Yellowknife that's a great achievement for us."

And while the company's main focus is on Caribbean foods, it is beginning to delve into the Latin/Hispanic food market with its recently acquired La Fe brand (from the U.S.). "The idea is to build that brand, and what we created for Caribbean food, we're going to create for Hispanic food — bringing Hispanic offerings to the mainstream," says Lankage. They expect to launch La Fe in Canada later this summer or early fall, after they adapt all the U.S. labels to meet Canadian specifications. "We've got very exciting things happening," says Lankage.





Q: What is your business philosophy?

A: Our philosophy is very simple: we want to take the Caribbean to the

Q: Why do you think coconut water is becoming so popular?

A: It has nutrition, and it has all the electrolytes that you require, so it's very popular for hydration. There's nothing better for hydrating than coconut water, because it's nature's hydration.



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