

Drivers and trends in food consumption

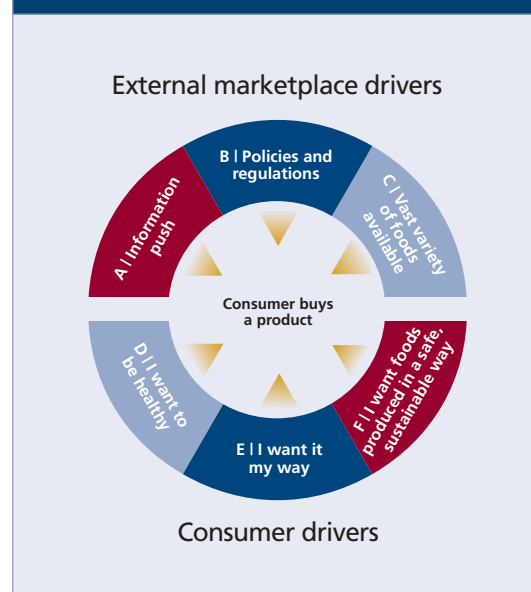


Consumers are influenced by external and internal drivers every time they purchase a food product. As mentioned earlier, income is the biggest driver of food purchases. Price should be a central consideration for all businesses.

In addition to price, consumers make choices based on external drivers like product health claims or advertising. They base decisions on individual needs like taste preferences, dietary habits or health concerns.

As you read about the external marketplace drivers and consumer drivers in Figure 6, think about which ones are relevant to your products and where your opportunities lie.

Figure 6: Drivers impact trends



External marketplace drivers

A. Information push



Consumers are inundated with information about food. Whether reporting on food-borne illness or questioning the world's ability to feed growing populations, the media influences consumers. In schools and other public venues, information campaigns suggest what foods to eat or avoid. How can you help consumers make sense of competing and sometimes contradictory messages?

Helping consumers make sense

Some companies post detailed product information to help consumers learn about their products. Atoka Cranberries from Quebec includes product and quality information sheets for each

Did you know?

Forty-five per cent of processed foods launched in 2008 contained health and nutrition messaging, compared to 31 per cent in 2002.

product on their website, citing facts on everything from expected shelf life to ingredients and data derived from chemical, physical and microbiological analysis of each product. In other

cases, the messages are simple. Food author Michael Pollan coined the expression, "Eat food. Not too much. Mostly plants." Minute Maid's top grossing Simply Orange Juice and Simply Apple Juice are just that, simply juice.

Did you know?

Aramark has introduced its Just4You program for vending, identifying over 150 better-for-you products through their vending and school programs.

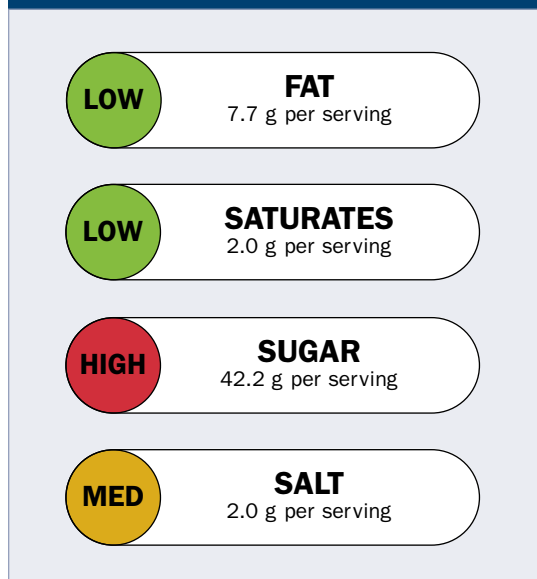
According to Datamonitor, 17.6 per cent of U.S. supermarkets are developing nutritional ranking labels. The NuVal nutritional scoring system in the U.S. makes it easier for consumers to rank a product's nutritional value. The U.K. Food Standards Agency uses signpost labels with green, yellow and red stoplight images. Green indicates low concern while red suggests higher levels of unhealthy ingredients. Researchers at the University of Washington and Yale University are developing new food ranking systems based on nutrient density or overall nutritional quality⁸ (see Figure 7).

Some companies use colour to simplify things. Unilever's "Eat in Colour" Knorr soup campaign features orange, green or yellow soup. Each colour corresponds with specific health claims, offering the simple message that brightly coloured foods are good for you. Parmalat in Italy features a line of products that offer five colours of health. Juices from Japan's Kayome come with a colour wheel to highlight functional benefits. Quebec-based

Did you know?

Beech Nut offers a "No Junk Promise" on some labels, making it easier for consumers to trust that the ingredients are healthy.

Figure 7: A nutritional scoring system



Colarôme Inc. manufactures natural food colorants and flavours from beets and red cabbage for use in nutraceuticals or candy coatings. Smarties brought back its blue candies offering functional benefits by colouring them with blue-green algae.

B. Policies and regulations



Most consumers are unaware of policies and regulations within the food system until a news story highlights gaps or concerns. Recent incidents of food-borne illness have prompted increased public dialogue about safety regulations. Some companies have already tightened up their standards before anticipated regulatory changes come into effect.

To counter problems related to trans fat, Cargill and Dow AgroSciences were producing high omega or trans-fat free, high-stability canola oil decades before legislative changes were made. What could you do to get ahead of the game?

Making it work – Global Egg Solutions

As President of Global Egg Corporation/ EggSolutions, Aaron Kwinter has seen the egg industry weather the ups and downs of high cholesterol concerns and come out on top. As a major player in the egg processing industry, Global has been watching consumer trends for many years. Food safety was a core value for the company long before widespread concerns emerged in the public arena. As Canada's first HACCP-certified egg processing facility, Global was ahead of its time. Aaron believes this gave them a competitive edge in working with industrial and foodservice customers who have come to trust Global's approach to food safety and strong corporate values.

www.eggsolutions.com

C. Vast variety of foods options



Innovations in packaging and advances in food science have created a system where the boundaries appear limitless. Products range from

Making it Work – Woolwich Dairy Inc.

Tony Dutra believes healthy eating has moved from a trend to a way of being. As CEO of Woolwich Dairy Inc., Canada's largest producer of goat cheese products, Tony is growing markets in Canada and the U.S. for his products. Tony uses consumer trends to move goat cheese products from niche markets to mainstream. He reads food magazines, attends North American food shows and travels to the Salon International de l'Agroalimentaire International (SIAL) in Paris. Woolwich's website includes information about its food safety certifications and quality assurance program because Dutra understands consumers want brands they can trust. The company strategy is to make products that taste good, are crisp and clean in appearance, and have high production standards.

www.woolwichdairy.com

new varieties of tomatoes, like Bellas from Demers in Quebec to new tomato products like Gouash tomato spreads by La Tomate, packaged in unique squeeze tubes. According to the Mintel New Products Global Database, nearly 15 times more whole grain products were introduced worldwide in 2007 than in 2000, representing an increase of 1,344 per cent. As you develop new products or rebrand existing ones, how can you stand out in the crowd?



Photo courtesy of Woolwich Dairy

Consumer drivers

D. I want to be healthy



Health is a leading driver in global food markets and a daily topic of debate and dialogue. Many consumers expect more health benefits from food products than ever before. Food allergies are common and obesity and cardiovascular disease widespread. Over the past decade, the number of overweight people in the world has often been equal to the number of undernourished people. It is predicted that by 2030, there will be 80 million people in India with type 2 diabetes. Many consumers are looking for a magic answer that will ensure good health.

Did you know?

New York City, California and Philadelphia have passed regulations that require calories to be listed on the menus of certain restaurant chains. Their goal is to raise awareness and combat obesity.

Two-thirds of respondents in a 2007 ACNielsen study felt that the pressure to look good is much greater today than it was for their parents' generation. The same study showed that globally, 1.6 billion adults are overweight and 400 million are obese.⁹ Health-care systems are stretched to the limit. The World Health Organization (WHO) links obesity to high blood pressure and type 2 diabetes and says that 80 per cent of premature deaths can be prevented by factors like a healthy

Did you know?

Since 2000, the health food industry worldwide has increased by over \$US 50 billion.

diet. WHO predicts that 700 million adults will be obese by 2015.¹⁰

Related trends we're watching:

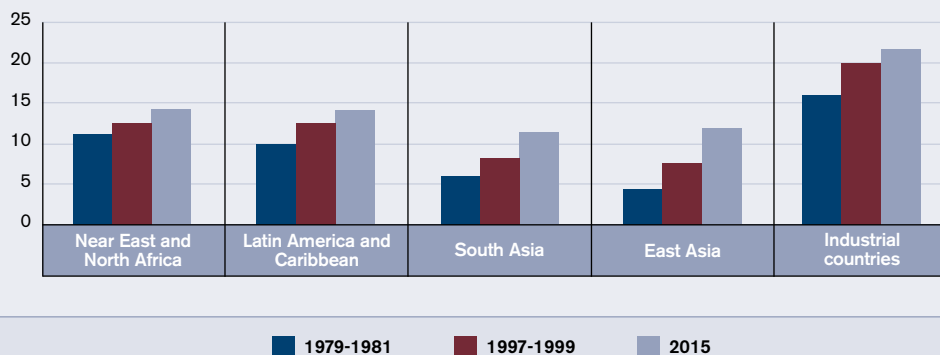
Healthy oils

Knowledge about the health benefits of oil is growing and it looks like your grandmother's daily dose of cod liver oil made sense. At the same time that trans-fat bans are growing, overall world consumption of oils is rising.


In Canada, the export value of fats and oils increased 52 per cent in 2007.¹¹ Current trends are showing a demand for healthy oils that include essential fatty acids (EFAs).

Researchers are experimenting with healthy replacements for commonly used oils. Canada's canola and soybean industries are developing oils to meet specifications of Consumer Packaged Goods food processors and restaurants in Canada. Researchers in South Korea and the U.S. have found a way to use functional ingredients extracted from oats to replace some of the fats traditionally used in baked goods. Interest in hemp products is growing, partly due to their high gamma-linolenic acid content.

Figure 8: Per capita consumption of vegetable oils



Source: Food and Agriculture Organization of the United Nations

A glass carafe filled with golden olive oil sits on a wooden surface. In the foreground, a white ceramic bowl also contains olive oil. The background is softly blurred, showing a plate with bread topped with white cheese and a green herb. The lighting is warm and natural, highlighting the texture of the glass and the rich color of the oil.

Essential fatty acids (EFAs) are fatty acids (linolenic, linoleic and oleic) that are necessary for human nutrition and can only be obtained through diet to support immune, cardiovascular, reproductive and nervous system function. The body can manufacture omega-9 from oleic acid on its own if the other two EFAs are present (omega-3 from alpha-linolenic acid and omega-6 from linoleic acid). Chicken, flax, fish oil and many other foods are rich in EFAs.

Making it Work – Manitoba Harvest Hemp

Mike Fata no longer weighs 300 pounds. He credits hemp products for his successful lifestyle change and weight loss. His story is a cornerstone of his marketing campaign for Manitoba Harvest Hemp. When asked how they monitor consumer trends, Mike replied, “We helped create some of them!” As Harvest Hemp has grown, Mike has continued to personally promote the health benefits of hemp at trade shows, consumer events and in-store demonstrations. Mike learns what consumers want by being on the street with them. Harvest Hemp has many customer testimonials on their website and is active on YouTube and MySpace. They send a monthly newsletter to over 5,000 readers and will soon be launching a customer blog. For Harvest Hemp, engaging and educating consumers is the key to success.

www.manitobaharvest.com

Organics, whole foods and superfoods

The trend toward purchasing food reduced in sugar, salt, fat or other ingredients has been strong in recent years. Whole foods and superfoods are a more recent trend, evidenced by the popularity of the Whole Foods Market chain. Whole foods have little or no processing. Foods like broccoli, almonds and oatmeal are often considered superfoods as they provide multiple health

benefits. It’s estimated that whole grain food sales in the U.S. will reach \$7.5 billion by 2009.¹²

There is debate about the future of organics. Some analysts don’t foresee a rapid rise in organics because of end-user price sensitivity. Others indicate growth. A Canadian Grocer publication showed 28 per cent growth in certified organic foods from 2005 to 2006 and many large retailers are including organic product lines.

Making it Work – ShaSha Bakeries

As business owner, ShaSha does more than make bread and cookies for customers. He engages them. Customers are involved in product testing, educational seminars and can access nutritional information on the company’s website. Formerly a chef consultant for a luxury hotel chain, ShaSha quit to develop a business selling products baked without yeast, made with a sourdough leavening agent from Egypt. ShaSha believes that some consumers have been awakened by personal health circumstances. He credits the growth of his business to a strong following of customers, many with health concerns, food allergies or an enlightened view of nutrition. He knows that customers also like his baking because the products taste good.

www.shashabread.com



Photo courtesy of Manitoba Harvest

Functional foods and nutraceuticals

A trip to the grocery store will reveal that functional foods and nutraceuticals are becoming mainstream. Recent Canadian consumer research shows that there is more awareness of functional foods and nutraceuticals, and increased appreciation of the health benefits related to their ingredients. Over 75 per cent of the U.S. population believes they are deficient in some nutrient.¹³ Functional foods and nutraceuticals offer natural and convenient ways to provide nutrition.

Health Canada and Agriculture and Agri-Food Canada developed the following definitions.

“Functional foods are similar in appearance to, or are conventional foods demonstrated to have physiological benefits and/or reduce the risk of chronic disease beyond basic nutritional functions. Functional foods may be developed by adding active ingredients to basic food products (e.g. muffins with beta-glucan, foods with added soluble fibre) or by using special production techniques such as plant breeding, genetic modification and specialized feeding regimes (e.g. tomatoes with enhanced lycopene levels, omega-3 eggs).

Nutraceuticals are products purified from foods that are generally sold in medicinal forms, such as powders, tablets or capsules, demonstrated to have physiological benefits or to provide protection against chronic disease. Nutraceuticals can be derived from plants (e.g. antioxidants, echinacea, fenugreek), from animals and microorganisms (e.g. elk velvet, essential fatty acids, enzymes, etc.) and from marine sources (e.g. glucosamine, chitosan, fish oils).”

Functional foods have been popular in Japan, the EU, the U.S. and China for several years. One study showed that 66 per cent of U.S. consumers used functional foods in 2008 and that educated female baby boomers were the biggest users.¹⁴ Many food processors are adding functional ingredients to products like bread, milk, yogurt and cheese. Most of the 2,000 members of the University of Guelph



Consumer Food Panel prefer healthy foods to come in a product form they are already eating. Canadian producers grow crops like borage, evening primrose, hemp and blueberries for use as nutraceutical ingredients. What could you produce or process to enter this market?

Consumers use nutraceuticals, often in pill or powder form, to customize their diets and meet their health needs. Some examples of nutraceuticals are beta carotene (derived from carrots for cellular antioxidation), flavonols from

Did you know?

About 20 per cent of Japanese consumers over the age of 65 regularly purchase functional foods. Foods with approved health claims in Japan are considered FOSHU (foods for specific health use). Are you ready to enter the FOSHU market?

onions (to neutralize free radicals), and lycopene from tomatoes (for prostate health). As our understanding of personal genomic coding increases and the demand for customized diets grows, is there an opportunity for your products in the nutraceuticals industry?

Intestinal bacteria live in our digestive systems. Probiotics are friendly bacteria found in fermented foods like sauerkraut and yogurt. Prebiotics are non-digestible foods that pass through our digestive systems and help the friendly bacteria to grow and flourish.



Canadian researchers are developing new food products. Some, like the University of Guelph, are developing omega-enriched milk. Others are finding new ways to optimize nutrition from whole grains.

Barley, rarely used as a food ingredient in North America, is being processed into flour for use in baked goods, pasta, snack foods, nutrition bars and noodles. The Canadian International Grains Institute and the Food Processing Development

Did you know?

Attribute-rich foods can be consumed directly by humans for enhanced health benefits and fed to animals to produce enriched products for humans. A diet fortified in flax can be fed to poultry to produce omega-3 enriched eggs. The Canola Council of Canada says feeding canola meal to dairy cows will increase milk production by one litre per day in comparison to soybean or cottonseed meal.

Centre in Leduc, Alta., are developing barley flour with enhanced nutritional properties and testing it with various food products. Whole grain barley flour is rich in beta-glucans, known to reduce serum cholesterol and the risk of heart disease. In December 2005, the United States Department of



Photo courtesy of Canadian International Grains Institute

Agriculture (USDA) approved a health claim that barley may reduce the risk of coronary heart disease.

To help consumers reach Health Canada and USDA-recommended pulse consumption levels, Canadian researchers are incorporating pulses into common food products like muffins, breads, pasta, cookies and noodles. They're also

Making it Work - Bioriginal Food & Science Corp.

In 2000, after developing an innovative line of flax-based products for functional food applications, Bioriginal opened offices in the Netherlands and China, and an oilseed processing facility in northern China.

More recently, the company worked with Agriculture and Agri-Food Canada to develop a new patented process for manufacturing conjugated linoleic acid (an essential fatty acid) and was one of the first Canadian companies to receive a site licence from the Natural Health Products Directorate. Bioriginal took innovation from the laboratory to the board room.

www.bioriginal.com

developing functionally enhanced flour from prairie grains for use in bakery products.

Wheat, buckwheat, pulses, barley and flax offer specific health benefits. Barilla from Italy sells whole grain pasta made from a blend of flours that includes wheat, lentils, chickpeas, spelt and others. What else do Canadian producers grow that could be a new functional ingredient for healthier foods?

Probiotics and prebiotics

Many products are enriched with the functional benefits of probiotics. BioGaia sells gum and lozenges with probiotics. Nestlé's Boost Kid Essentials boxed dairy drink includes the bacteria in the straw. Could your food products be enriched with probiotics or prebiotics? What could the next trend in additives or functional ingredients be?

E. I want it my way!



Some consumers want their purchases to define them. Others want their products to offer an experience. This trend is growing and many products and services are already being tailored to meet the global demand for customization.

Related trends we're watching

Ethnic foods

Growing racial and ethnic diversity throughout Canada, the U.S. and the EU offer opportunities to provide niche products. Ethnic food markets are growing in cities (see Figure 9). The George Morris Centre forecasts that by 2017, more than half of the Greater Toronto population will be non-European in origin. Their study of the Canadian pork industry suggests that the ethnic Chinese market is currently worth \$47 million and that Mandarin and Cantonese consumers want a different sensory experience in taste, texture, tenderness and colour than other Canadian consumers.¹⁵ How could you change your current food products to meet the unique needs of ethnic market segments in North America or overseas?

Halal food

Halal refers to foods that are permissible under Islam based on the content and process.

Guidelines to produce Halal foods are extensive and can be applied to meat, seafood, dairy, grains, oilseeds, fruits, vegetables, beverages, nutrient supplements and pharmaceuticals. There are 1.5 billion Muslims in the world, with between nine and 10 million Halal consumers in the U.S. and over 800,000 in Canada. It is projected that by 2011, there will be more than one million Halal consumers in Canada and that 10 per cent of the population of Metro Toronto will be Halal consumers.

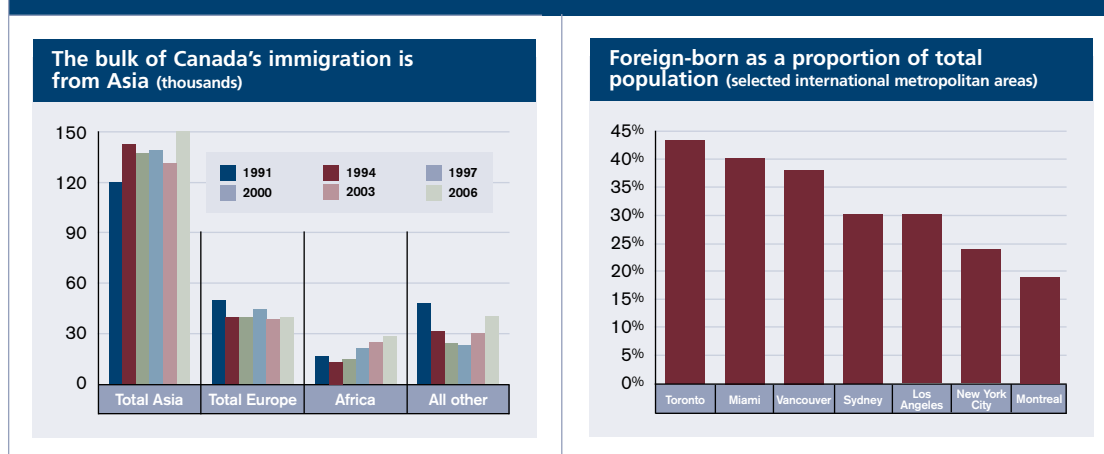
Kosher food

Kosher certification is becoming common at many stages of food value systems. Kosher foods meet specific, detailed Jewish dietary laws. Producing kosher foods or labelling them more clearly is a growing trend in North America and other developed countries. A broad perception that kosher foods are safer has contributed to recent growth, with as many as two-thirds of kosher products in the U.S. purchased by non-Jewish consumers. Many Canadian producers, large and small, include kosher certification on their labels, websites and other promotional material.

Food allergies

Consumer awareness and concern about food allergies and sensitivities is growing. The impact of food allergies is widespread, from consumers

Figure 9: North American Markets for ethnic foods



Sources: Statistics Canada

Did you know?

Pomegranate is a kosher supermarket in New York similar to the Whole Foods Market gourmet mega-store model. Their motto, “Even better,” reflects their highly regulated processing standards. Rabbis supervise kosher standards in three kitchens – one for dairy, another for meat and a third for parve (fish, vegetables, fruit and grains).

seeking customized foods to schools becoming peanut-free. The United States Department of Agriculture’s National Peanut Genomics initiative is using plant genomics research to mitigate peanut allergies in consumers.

I want foods I can afford

Income is the biggest driver of consumer purchases. Some consumers are willing to pay a premium for foods that meet their individual needs or preferences. For others, price is the key factor in making a purchase. Other factors come next. What else do you need to understand about your customers’ price sensitivity?

What will the future bring?

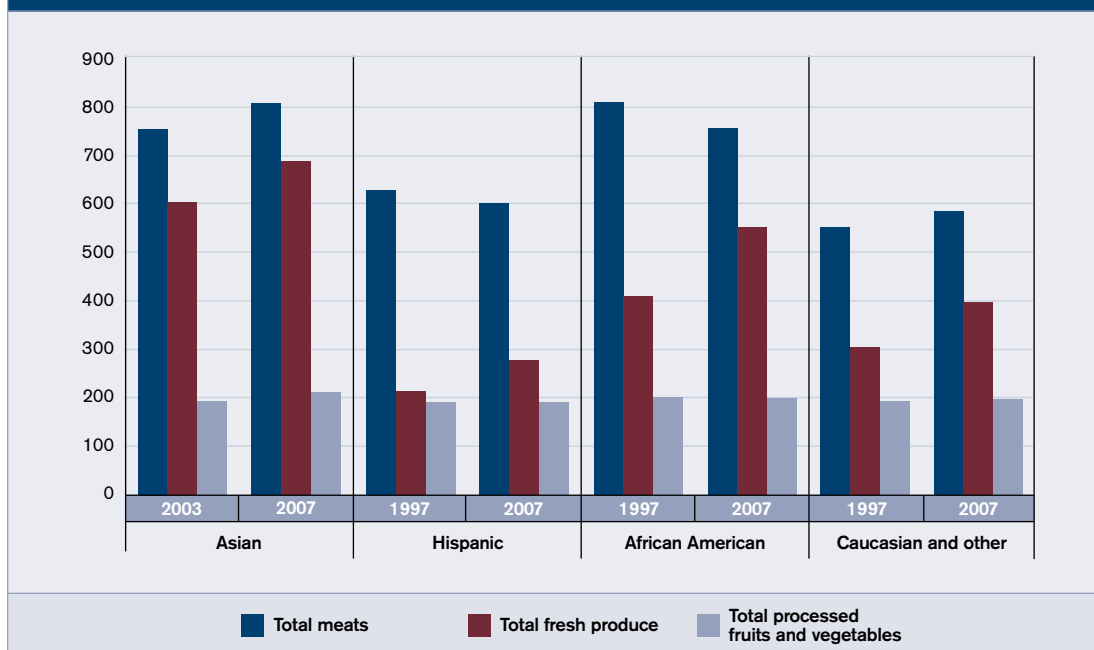
Mass customization

Through their Clubcard program, global retailer Tesco offers millions of product lines, each one slightly different. By tracking purchases and using the data to influence product design, Tesco combines mass production with the demand for customization, allowing them to mass customize products.

Genomic coding

Nutrigenomics studies how genetic variation determines each body’s requirements for, and response to nutrients. After 10 years of work, in 2000, the Human Genome Project completed its first draft of research, which allows scientists to use DNA profiles to tailor individual diets. California-based Pacific BioSciences claims that they can sequence a person’s entire genome in half an hour at a cost of less than \$1,000. Personalized nutrition based on genotype could be the future of food.¹⁶ If so, existing food systems will require massive re-engineering. What could you do to get ready for this change?

Figure 10: Ethnic-based consumption patterns in the U.S. (kg per capita)



Source: Statistics Canada

F. I want foods produced in safe, sustainable ways



Some consumers are demanding more sustainable, greener solutions from their food products and systems. Most want to trust that foods are safe to eat. As the world searches for sustainable solutions and builds more secure food systems, what opportunities can you create for your business?

Related trends we're watching

Food safety

The globalization of food supply has pushed the limits of safety systems. No system is perfect. Food safety is needed at all stages, including food

Did you know?

Canadian Partnership for Consumer Food Safety Education has launched a new website to raise awareness about food safety practices at home.

www.befoodsafe.ca

preparation at home. Technologies to address food safety concerns like canning, freezing, pasteurization and vacuum-packaging have become commonplace. Technologies such as food



irradiation and genetic modification can challenge consumer confidence. Increasing calls for greater food safety are prompting further research and innovation.

Traceability

Not in retail? Wondering how consumer trends apply to businesses that don't sell directly to end use consumers? Here's some food for thought. As food systems become more traceable, all players in value chains will experience increased scrutiny regarding issues of food safety, sustainability and other consumer trends. Canada's federal agency CanTrace advocates food supply chains that can trace one step forward and one step back. What will you do to get ready?

Sustainability

The food industry can make it easier for consumers to feel good about the effect that their purchases have on the environment. The U.K. uses food miles as one measure of the overall environmental "food print" of agriculture and agri-food. Japan's Sapporo Breweries is the first beer company to advertise its carbon footprint on cans. Environmental, humane, natural and organic trends in the EU are often ahead of the rest of the world. When your value chains start calculating CO₂ emissions, will you be ready? What can we learn from food systems overseas?

Who are the early adopters or trend setters?

Dole Organics is an industry leader in traceability. The Planet Dole program allows consumers to log onto their website and, using the code from the label of a Dole product, they can enjoy a virtual visit to the farm where that piece of fruit was grown.

The Carbon Trust program in the U.K. measures carbon used in creating products and lists it on their labels. Juice manufacturer Odwalla contributes to farmland conservation and keeps 99 per cent of its fruit and vegetable waste out of the landfill. Ice cream maker Haagen-Dazs recently began a honey bee conservation program.¹⁷





Learn how Flanagan Foodservice, Inc. is "Making it Work" on page 17.

Photo courtesy of Flanagan Foodservice, Inc.

The response of Maple Leaf Foods to the 2008 listeria outbreak is seen as a model for corporate trust, transparency and accountability by the publication Food Safety & Quality and others. Maple Leaf developed a values-based code of behaviour to guide quick decisions based on two corporate values – do what's right, and dare to be transparent.

Making it Work – Sunworks Farm

In 1995, Ron and Sheila Hamilton started growing organic chickens for their own use. Faced with various health concerns, from allergies to celiac, the choice was personal. Sunworks Farms is now the largest organic chicken producer in Alberta, raising over 100,000 broilers per year. Their operation is expanding to keep up with demand. According to Sheila, they have grown 20 to 30 per cent per year without doing anything different. Today, Sunworks Farm sells organic, free range chicken, turkey, duck, geese, pork, beef and eggs to consumers at Edmonton and Calgary's farm markets or directly from their farm. While Sunworks has grown, it hasn't lost sight of its roots. Sheila talks to customers regularly to find out what they want and speaks to groups about her family's journey back to health. She hears from customers who want clean, quality food and who like to know where it comes from. She invites them to Family Farm Day to share a meal every Labour Day. Guests bring condiments and Sunworks provides the meat.

www.sunworksfarm.com

Final thoughts

Modern food systems have come a long way. Innovations in logistics and food handling systems have improved our ability to move fresh goods around the world. Scientific advances have increased crop yields. Our growing understanding of human health and the nutritional properties of foods is furthering the development of functional foods and ingredients. Consumers in developed and developing countries expect food to be plentiful and nutritious. Recent developments in packaging and nutrigenomics provide hints about what the future of food will look like. How can you be ready to meet their needs in the new era of food consumption?

Monitoring long-term consumer trends and understanding what consumers want can help you distinguish trends with real value from passing fads. While you understand what your customers want today, what about your future customers? Whether they're looking for a quick, convenient meal or want sustainably produced foods, understanding what matters to consumers can help you meet their needs. Sustainability and health will drive consumer purchases. What else is on the horizon?

To be sustainable, businesses will find ways to meet the needs of consumers and the environment while remaining profitable. Understanding what the consumer wants is a good place to start. The future of your business and Canadian agriculture lies in finding the right mix between the needs of people and the planet.