

# Leaders Summit on Food for a Healthy and Prosperous Future

## PROCEEDINGS REPORT

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**CAPI**

THE CANADIAN AGRI-FOOD  
POLICY INSTITUTE



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Canada 

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## **1.0 INTRODUCTION**

In February 2010, the “Leaders Summit on Food for a Healthy and Prosperous Future” brought together more than 60 leaders to explore new opportunities for the agri-food sector while helping Canadians adopt a more nutritious diet. Participants addressed three core questions:

1. Why should the Canadian agri-food sector become an advocate for a better diet and shift its focus to supplying “healthier” foods and ingredients?
2. Why should the health community become an advocate for a viable Canadian agri-food sector?
3. How can agriculture and health policy converge to achieve a more healthy and prosperous future?

This document summarizes the Summit presentations and the discussion among participants. The agenda, list of participants and the complete presentations described below are available on the CAPI website at:

[<http://www.capi-icpa.ca/LeadersSummit>]



## 2.0 WELCOME

### Mr. David McInnes, President & CEO, CAPI

Mr. McInnes set the stage for the event by posing the question: “Why are you here?” He noted that all of us know that health and agriculture are connected; after all, food is essential to life and our well-being. But it is more than this. **We need to achieve better population health outcomes and better prospects for the agri-food sector — this is the power of the “and.”**



CAPI is a catalyst. It brought leaders together from across the agri-food and health sectors, research community, and government to explore how we can achieve these objectives. The Summit was designed to kick-start a process, to bring leaders together to learn from one another and create a basis to move forward together so that we can, collectively, be relevant to the unfolding policy process. Now is the time to identify the pathway forward.

### Mr. Gaetan Lussier, Chair of CAPI Board of Directors

Mr. Lussier thanked the participants for attending. He described the work CAPI has done on this subject to date, citing the *Finding Common Ground* and *Building Convergence* reports that CAPI produced in 2007 and 2009, respectively. The former researched what was occurring on this topic worldwide. The latter developed the principles of an integrated health and agri-food strategy.



Mr. Lussier described the costs related to healthcare, and noted that this expense is increasing dramatically. Last year, the cost represented some 11% of Canada's GDP. Heart attacks, obesity, and cardiovascular illnesses cost Canada \$6 billion annually. Meanwhile, Canada's agriculture sector is suffering from intense global competition.

**If Canada is to focus on prevention in healthcare, then an improved diet and the agri-food sector can play a central role in that effort.** The agri-food and health sectors need to learn to work differently than in the past. This requires a collective approach. This initiative must succeed. Canada can save money on future healthcare costs and improve the economic prospects for the agri-food sector. Canadians can develop a unique niche market at a global scale.

### 3.0 THE CONSUMER

#### Healthy Diet Partnerships: Public Policy and Funding for Agri-Food Industry Projects

**Dr. Alain Poirier, Assistant Deputy Minister, Ministère de la Santé et des Services sociaux and Chairman of the Board, Société de Gestion du Fonds pour la promotion des saines habitudes de vie, Québec**



##### *Government Action Plan (GAP)*

In Quebec, 44% of the provincial budget is spent on health and social services. To improve health and manage rising health costs, the government developed a Plan d'action gouvernemental, or a Government Action Plan (GAP). It involves eight government departments. At the core of the plan is the notion of partnerships that promote a healthy diet and active lifestyle.

**Policies are needed that improve the overall diet quality for the population, with a focus on places where partnerships can make a difference:** schools, the workplace, the health sector, and municipalities.

In March 2009, the government began to implement the plan, initiating 75 actions, of which 53 are underway.

As an example of a dietary area requiring improvement, Dr. Poirier cited excessive sodium intake. Across the age spectrum, men in particular are exceeding the upper recommended daily uptake of 2,300 milligrams. The average intake in Quebec is 3,350 mg, and in Canada overall 3,092 mg. Through the GAP, the government is working to provide the public with information on the health impact of the food they consume. A significant reduction in sodium intake, for example, would reduce the cases of hypertension and cut treatment costs dramatically. The result in Canada could be a \$430 million saving in healthcare costs.

Policies in agriculture and health can be at odds. The consumer must become better informed, which means providing the consumer with better information. The food industry, in turn, must do more responsible marketing. **In part, the GAP program is not about telling people what to eat; it is about informing them of the nutritional value of different foods, so that people have the knowledge to make healthy choices if they wish.** French fries and potatoes, for example, have contrasting nutritional values. The GAP seeks to inform hospitals, schools, and daycares of the kinds of food they should be providing. The GAP won't impose restrictive dietary rules.

## Fonds pour la promotion des saines habitudes de vie

In June, 2007, an Act established the Fonds pour la promotion des saines habitudes de vie (Fund for the promotion of a healthy lifestyle). The fund was a partnership between the Lucie and Andre Chagnon Foundation (LACF) and the Government of Quebec, valued at \$480 million over 10 years (2007-2017). The mission is to encourage young Quebecers to adopt a healthy diet and a physically active lifestyle and promote the environments favourable to a healthy lifestyle. This is a unique model in Canada.

The LACF and the Quebec government each invest \$24 million per year, with another \$1.3 million coming from the Public Health Agency of Canada in 2008-2010. With these investments, the Fund supports provincial and regional projects, and local community mobilization projects. Under the program, 12 provincial projects and 18 regional projects are underway. At the community level, activities are underway in 30 communities, benefiting 305,000 children.

Below is a snapshot of the latest call for proposals of the Fund, which are directly linked to the agri-food industry. Three projects have been selected and are underway.



**Figure 1: The Fonds pour la promotion des saines habitudes de vie supports initiatives that promote a healthy diet and physically active lifestyles in Quebec.**

For more information about these projects and other initiatives supported by the Fund, please visit [www.saines habitudesdevie.org](http://www.saines habitudesdevie.org).

## Diet, Dollars, & Destiny: Rethinking links in the Food Chain

**Dr. David Katz, Director and Founder, Prevention Research Centre, Yale University School of Medicine**



Over the past 20 years, compelling evidence has revealed that lifestyle is the single biggest factor influencing health. Tobacco, diet, and physical activity are the main components. Pay proper attention to these three issues and you are master of your destiny. Your destiny is controlled by feet, forks and fingers.

A Pottsdam study asked people: are you a non-smoker, do you eat well (fruit, vegetables, and whole grains), are you physically active and do you control your weight? Those who answered yes to all four questions had an 80% lower risk of disease. **An 80% reduction in the risk of any of the slings and arrows (bad health effects) exists simply by eating well, being active, and not smoking. Although this result sounds compelling, this evidence isn't new. We need more than knowledge to influence behaviour.**

By moving toward a healthier lifestyle, we aren't only saving our lives, but money too. By 2018, more than 100 million Americans will be obese, and \$340 billion will be spent annually on obesity. That is triple the current amount. In the US, per capita healthcare spending will rise from \$361 to over \$1,400 per year.

Also worthy of more attention is the reciprocal back-scratching that agriculture and health could achieve. **The health sector must address the enormous impact of food on health. The agriculture sector needs to address the needs of eaters and the needs of feeders.** The health sector can subsidize agricultural innovations that promote health. It can save money that it spends on chronic disease, such as diabetes. These savings can help the agriculture sector get an infusion of support from a new area, and maintain or enhance current profits, while contributing to the public good. A little intervention goes a long way. For example, a better diet can dramatically reduce diabetes and the associated healthcare costs.

Consumers are caught in a situation of navigating their way through a myriad of products, trying to decide what is healthy. For example, normal peanut butter may have less fat than "reduced fat" peanut butter, but that doesn't make reduced fat peanut butter healthier, because it may have more sodium, more total carbohydrates/sugar, more added sugar, less fiber, and comparable calories. The package never tells the whole truth.

Nutrient	Peanut Butter	Reduced Fat Peanut Butter
Sodium	150mg	250mg
Total Carbohydrate/sugar	7g	15g
Added Sugar*	3g	4g
Saturated Fat/Trans Fat	3g/0g	2.5g/0g
Fiber	2g	1g
Calories	190/32g	190/36g

### NuVal SCORE



Figure 2. Comparison of nutrients in two varieties of peanut butter.

A new proposition called NuVal is worth examining. The Nu stands for new age and the Val originates in the term value. The NuVal concept is predicated on the idea that it shouldn't be so hard to figure out what is nutritious. Let's do the same for food as we do for health. We should figure out what is the best loaf of bread and say so. **We need a symbol on every food, and make everyone a nutrition expert. Right now, people cannot make a point of eating well, because they don't know the real nutritional content of the food they're buying.**

Dr. Katz worked with a panel of leading scientific experts from the US and Canada to develop an algorithm to score the overall nutritional quality of any food. Roughly 30 nutrients in a given product are considered. Every nutrient is weighted for three considerations: the severity and prevalence of the health conditions with which it is associated, and the strength of the association between the nutrient and that health outcome. For two years, a team at the Massachusetts Institute of Technology worked on generating the database, producing nutrient scoring for 45,000 foods. For example, they found that iceberg lettuce is good for you, but not as good as various other types. The NuVal algorithm is built around a concept called a trajectory score, which addresses this question for each nutrient in a food: how does the concentration of the given nutrient in a food compare to the recommended concentration of that nutrient in the diet overall?

When the Harvard School of Public Health assigned a NuVal score to the diet of women in the Nurses Health Study and men in the Health Professionals Follow-Up Study (110,000 people in all), NuVal scores were better able to predict the emergence of chronic disease or causes of mortality than the HEI-2005 (Health Eating Index-2005). As the NuVal score goes up, mortality goes down. The NuVal system shows that individuals can improve their health one well-informed choice at a time.

## Real Food for Real Kids: From Local Farms to Local Tummies

### David Farnell, CEO, Read Food for Real Kids Inc.

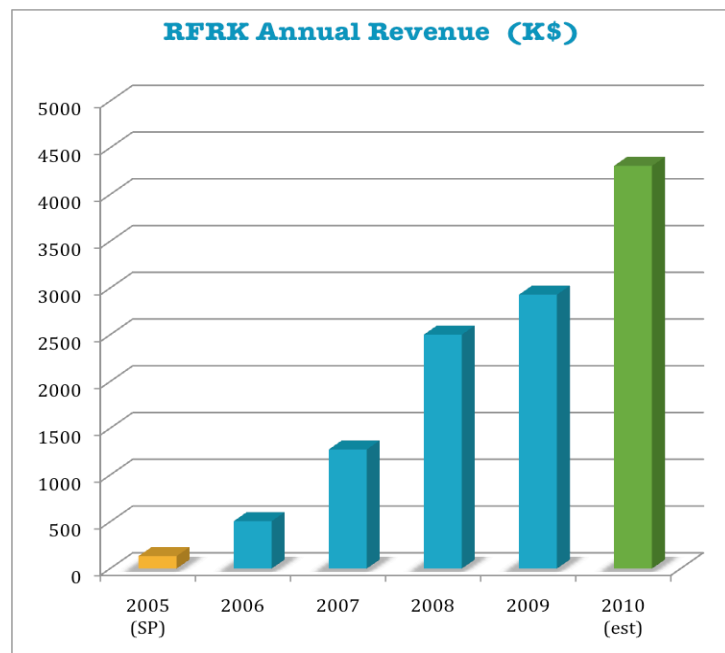
Real Food for Real Kids Inc. emerged from the concern David and his wife, Lulu, had about the nutritional content of the food being served at their son's daycare. They offered to bring healthy food from home, and soon were preparing food for the entire daycare. The daycare, like many centres, had been serving pre-prepared foods. David and Lulu were concerned that their child might become accustomed to food rich in sugar, fat and salt.



Eventually, the two were providing food for 12 daycares, and running a company driven by their concept of healthy food. In its first year, the company did just under half a million dollars in business. The company grew, and in 2010 is projected to generate over \$4 million in revenue. The company now caters to 116 daycare centres, services a number of camps, and has developed a lunch program at schools that don't have cafeterias. The company serves 5,574 kids every day. It has 50 employees, and is supplied by 29 local growers and producers. For the sake of the environment, the company tells kids to bring stainless steel containers to school and serves food in bulk, eliminating waste. The company also educates kids on where the food comes from and its nutritional value, such as explaining that broccoli contains calcium.

Real Food saw that catering companies didn't make the food from their own ingredients, and often didn't even know where it came from. So Real Food made a commitment to buy directly from local farms.

As well, the company founded Real Food Forward, a charitable arm of Real Food for Real Kids. Through this initiative, RFRK provides free lunches to kids from underprivileged areas.



**Figure 3. Real Food for Real Kids annual revenue.**



## DISCUSSION AND NOTES ON “THE CONSUMER” PRESENTATIONS

- **Taxing foods** is counter-productive. People should be left to eat as they wish, and will compensate for it through physical activity. For people with lower incomes, fresh produce is particularly expensive.
- **Regulations** are needed to encourage healthier consumption. However, any regulations introduced — in the view of retailers — must be created within the context of what is feasible for a given community.
- A unified **labeling system** is needed that provides genuine, unbiased information about a product, rather than messaging that allows the industry to espouse the health benefits of a product without truly representing the product's negative ingredients. For example, you shouldn't be able to say a product is healthier because it has less sodium, if the overall nutritional quality of the product isn't improved.
- Truly healthy products could be rewarded with a “seal of excellence” that is based on a standardized **evaluation system**. This program would be an incentive for companies to improve the nutrition of non-recognized products.
- Kids can be induced to eat healthier, if food is cooked and presented in an appealing way. But effort must be made to develop **better cooking habits** so that foods are made with real ingredients.
- Consumers need ready access to **information on nutrition**. A dedicated website should be created, one supported by the entire value chain, from farm to fork. The URL should be displayed on grocery items.

## 4.0 POWERFUL POSSIBILITIES

**Wayne Stark, CEO, Pursuit Development Labs Inc.;  
Co-Chair, CAPI Leadership Panel on Food and Wellness**



The major themes emerging from the Summit:

**Consumers: Consumers are paramount.** What concerns consumers? People are concerned about health issues; they want to live a long and vibrant life and are concerned for their children's health. People are also interested in supporting the local economy. And they're interested in organic products, based on the perception that these products are more nutritious and better for the environment. People like the idea of "natural" products. These concerns are stimulating a strong organic and natural-foods movement.

**Health:** More and more people are contracting serious illnesses. Medical costs are going through the roof. To cope, many organizations are promoting prevention. Retailers are increasing their focus on fresh, natural, organic, and "better for you" products. They are also seeing the advantage of buying locally. Supermarkets are moving in this direction. This trend gives local farmers access to these markets. The restaurant industry is focusing on light menus that are low in fat. **Consumers are driving this trend.**

Canada must join this trend. **Currently, it is difficult to be innovative in Canada, and that has to change. When we add value to commodities, we succeed.** Mr. Stark drew a comparison to the green energy movement. The Germans decided to get on the forefront of that issue. In Canada, we need to create a regulatory framework that works for the agriculture sector.

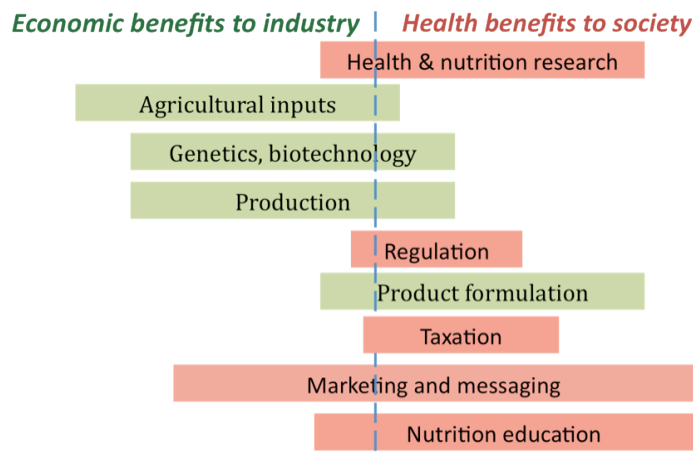
## 5.0 WHAT'S WORKING: PROGRESS AND SUCCESSES

### Food and Health Case Studies

**Dr. David Sparling, Chair, Agri-Food Innovation and Regulation, Richard Ivey School of Business, University of Western Ontario**



The motivation for an integrated health and agri-food policy comes from the fact that **Canada is facing a health crisis, and new nutrition research is identifying opportunities to impact health through food innovation. Food and health policies have been separate in the past (and are often at odds) but linking them has benefits for both sectors.** In addition, the quality of media coverage on food, such as recalls on beef versus benefits of broccoli and blueberries, varies widely.



**Figure 4. Overlap between health and food policy.**

There are several areas where health benefits to society and economic benefits to the industry intersect:

- Health and nutrition research tends to be government-funded, but needs industry support. Healthy food markets are being communicated to consumers through the media, and consumers are looking for direct links between food and health attributes.
- Industry can support production with extension services and education, and can help organize production and marketing. Industry can collaborate with partners across the value chain, as well as NGOs and agencies interested in health issues.

- Regulations can be helpful, and health claims are beneficial but aren't being delivered quickly enough. Labeling must be consistent across Canada and North America.
- Messaging is critical. Health benefits must be communicated, and media are essential to this effort. People need to be informed of the benefits of organic or natural products.

### Case Studies

**How do we integrate food and health policy? Studies of food innovations allow us to assess how we can create social benefits (better health and lower healthcare costs) and economic benefits (new products, high sales, more value). The case studies were DHA milk, wild blueberries, and pulse crops.**

From these studies we have learned:

- For DHA milk, health claims are long and expensive. Patent protection is necessary in order for companies, like Neilson, to invest. They won't do it unless they're getting a return. On the other hand, a proprietary product limits industry opportunity. Consumer awareness of the health benefits is important, but needs to be communicated.
- For blueberries, huge potential exists, but more direct linkages to health benefits are needed. Inter-provincial trade barriers and regulations are an impediment. The Wild Blueberry Association of North America is an excellent example of cross-border cooperation.
- For pulses, there are many scientifically demonstrated benefits. But the messaging must be stronger. Consumers need to know why this ingredient is important. Pulses sell well in the Asian markets, but not due to health benefits. Pulses are certainly not hitting their potential. Product preparation is a challenge, while regulations around food formulations are a barrier to pulse innovation.

**Thus far, food and health policy links are weak and must be improved. Ultimately, health issues are the next big opportunity for the agri-food industry.** But it's only at the starting point. Messaging to articulate health benefits is a constant but critical challenge. **Both industry and government must be engaged.** To achieve an integrated food and health policy, proponents need to pick some initial targets and get started.

## The Justification of an Ag-Health Research Strategy in Canada: What is CCARM? A Journey from Bench to Bedside to Better Living

**Dr. Grant Pierce, Executive Director of Research,  
St. Boniface General Hospital Research Centre**



The Canadian Centre for Agri-Food Research in Health and Medicine (CCARM) is conducting research to address the relationship of food and chronic diseases like heart disease and stroke. Heart disease is the number one cause of death and the largest drain on our health care system. **Over 90% of all heart disease can be predicted from: smoking, poor nutrition and lack of exercise. All of these are modifiable behaviours. Effectively, this means we can alter the leading cause of death by 90 percent. We have healthy living in the palm of our hand. We only need the will to institute and support a plan of preventive medicine.**

**Nutrition is one of the most important weapons in our preventive medicine arsenal. But how is this relevant to the agriculture sector? The demand for a crop is directly related to its health benefits.** If we know that a food is healthy, then we will want to purchase it. If demand for the crop increases, then the farmer benefits and the entire agriculture industry will benefit.

CCARM is founded on the principle that healthier food products can reduce chronic disease. CCARM is a medical research program that goes from bench to bedside. It starts with animal research, goes to clinical research, and then clinical trials. CCARM is unique in the world because a) it has regulatory expertise and capacity for foods and clinical trials; b) it conducts food research in a medical research environment; c) it moves information translationally from the bench to the bedside; and d) it is organizationally unique in that it has brought together a major government agricultural organization together with a tertiary hospital and a major medical University. The trials are approved by Health Canada, which is ultimately essential for health claims. CCARM is a formal agreement, valued at \$32 million, between Agriculture and Agri-Food Canada, St. Boniface Hospital and the University of Manitoba.

### *Flax Research*

A large percentage of the world's flax is grown in western Canada. It contains essential omega-3 fatty acid – ALA. Researchers suspect that flax influences cardiovascular disease. For this project, researchers fed mice varying diets, which showed huge variations in plaque build-up; those fed flax showed much less build-up. The overall conclusion was that flaxseed supplements in the diet will inhibit atherosclerosis and arrhythmias, improve vascular relaxation, and act as an anti-inflammatory.

The data was suitably compelling to move to clinical trials. Initial research showed that when fed whole flaxseed, ground flaxseed, and flaxseed oil, ground flaxseed and flax oil provided ALA to people but whole seed did not. It increases the most if it comes from oil. Researchers found flaxseed oil is absorbed just as well in young people (aged 18-29) as in older people (aged 45-69 years).

Can increased ALA help stop heart attacks, strokes, and reduce the need for surgical interventions? CCARM set up a year-long experimental program of feeding people 30 grams daily of flax, in the form of flax muffins, flax bars, buns, and tea biscuits. Researchers secured a van and arranged to have these products, frozen, delivered to peoples' homes. Over 100 people are participating. The results will be known in 2011.

In the end, the CCARM hopes to have demonstrated the therapeutic and health benefits of this ingredient, such that products containing flax can be popularized and more commonly produced for the marketplace. **Ultimately, the project could lead to creating tasty, economic and nutritional products that will deliver therapeutic doses of flaxseed.** The entire project will have traveled from the lab bench to the bedside to better living for the general population.



**Figure 5. Researchers suspect flax influences cardiovascular disease.**



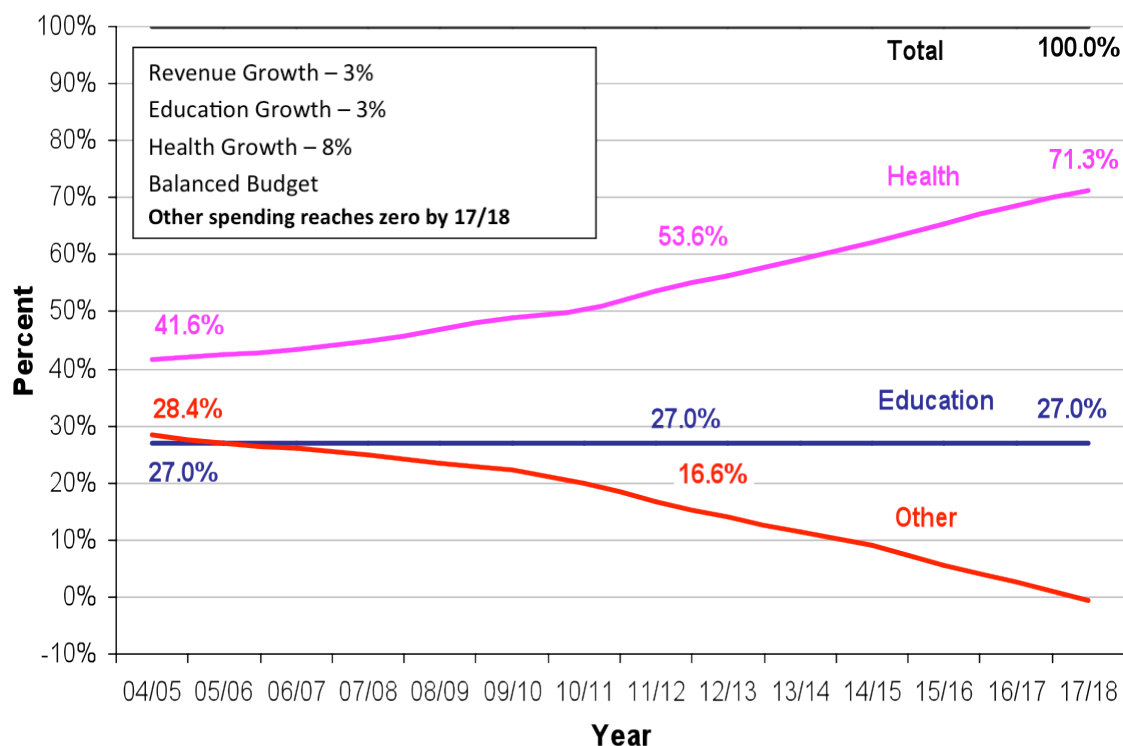
## What's Working: Progress and Success

### Dr. John Millar, Executive Director, Population Health Surveillance, Provincial Health Services Authority, BC



The prevalence of obesity in British Columbia, the increase in chronic disease, and the corresponding impacts on healthcare expenditures are threats to population health, healthcare sustainability, and productivity and competitiveness. **By 2017-2018, BC's projected budget will be almost totally consumed by health (71.3%) and education (27%) for a total of 98.3%.** Less and less money will be left for other needs.

People cannot eat right if they can't afford to buy healthy food. Dr. Millar described a BC society plagued by an "obesogenic" environment, where sedentary lifestyle is 18% of the problem (sprawl, cars, TV computers) and food is 82% of the rest of the problem (production, distribution, marketing and consumption of unhealthy food and beverages laden with fat, sugar and salt). **People don't have enough access to health foods: fruit, vegetables, whole grains. This is a system failure. We create mass amounts of bad food at cheap prices.**



**Figure 6. Health care expenditures in BC.**

The tobacco program is a success. Measures that reduced tobacco use included: taxation, advertising/sponsorship restrictions, product labeling, education/social

marketing, smoking bans, limited access in stores, and nicotine replacement therapy.

Progress has been made in pursuit of healthier diets: bans on advertising, trans fat regulations, nutrition information on packaging, the food mail program in rural and remote Canada (reducing price of healthy food), taxes on unhealthy foods, comprehensive school programs, community mobilization like the EPODE program in France, and programs like Shape Up Somerville in the US (supported by the US First Lady, Michelle Obama).

BC can learn from these examples. BC wanted to introduce an Obesity Reduction Strategy, driven in part by the premier's desire to capitalize on the Olympics. The province developed an "Act Now" initiative that includes measures such as providing nutrition guidelines for institutions. Dr. Millar identified four areas needing attention:

- Food security: In BC, 15% of families are living in poverty. This causes ill health including obesity and heart disease. Improved population health means restoring the social fabric. Farmers markets must be encouraged. Local food distribution programs are needed.
- Land use: Zoning requirements should account for the need to protect agricultural land that can be used for the production of healthy food.
- Food safety: This requires meat inspections, controls on raw milk sales, food handling training, and restaurant inspections.
- Global food chain: Distribution is important, and requires sound ports, rail, air, highways, energy, water, sewage, and waste disposal infrastructure.

We need to lower production and consumption of calories and food high in sugar, fat, and salt. **More fruit, vegetables and whole grains are needed in the diet. Complex interventions are required through engagement at all levels: government, NGOs, and private sector.** These parties must work together to encourage the following:

- Subsidies for production and distribution of fruit, vegetables and grains.
- Sales tax on unhealthy foods.
- Production of sugar and fat should be discouraged.
- Nutrition labeling in restaurants, and FOP signposts.
- National healthy food standards.
- Bans on advertising unhealthy foods to children.
- "Family friendly" check-outs free of soft drinks, candy and chips.
- Social marketing to encourage gardening and cooking healthy foods.

## DISCUSSION AND NOTES ON THE “WHAT’S WORKING” PRESENTATIONS

- Ideally, **science** will drive policy. But in some cases you must advance the policy, and then seek out scientific support. The science must be able to provide some sort of measurement of progress, so that people can see the progression in terms of the success of the policy.
- The CCARM work puts a **quantitative measure** to a food instead of a drug. The difficult thing is to pin down which ingredient is making the difference in one’s health.
- We need to network the expertise in Canada, so that **producers and scientists connect**. Then great things happen. For example, clinical trials at the Institute of Nutraceuticals and Functional Foods (INAF) in Quebec City have demonstrated the benefits of cranberry.
- Many facilities exist in Canada that can be used to **research** the benefits of nutritional products, such as the St. Boniface Hospital, the INAF in Quebec City, the Institute for Nutrisciences and Health in Charlottetown, and the Plant Biotechnology Institute in Saskatoon.
- Methods must be found to make it easier for consumers to change their behaviour. No silver bullet exists. Messaging is key. For example, the need for people to get more exercise must be regularly communicated. There are many examples where **consumer education** can improve peoples’ behaviour. Allowing fast-food outlets to be located in the vicinity of places frequented by youth, such as malls and schools, is not helpful.
- Youth **education** is needed. Nutrition information should be provided at schools and daycares.
- The health benefits of products — either as whole food (blueberries, salmon) or as ingredients (Omega 3, probiotics) should be translated into **packaging** that describes consumer benefits (e.g., good for your heart, strengthens your immunity).
- We need to ensure that the solutions are Canadian-made, and not imported. The benefits of the right solutions need to be felt by the agri-food sector here at home, if the sector is to become more **competitive**.
- What are the products that will give **Canada an advantage** over the rest of the world? That’s where we have to focus. What are the potential health opportunities for those products?

## 6.0 HOW TO ACCELERATE SUCCESS

### The Food and Health Connection: Getting our facts straight to accelerate our success

**Ms. Karen Basian, Vice-President, Strategy, Mergers and Acquisitions, and Innovation, McCain Foods**



In the past, nutrition and health have been looked at separately from agriculture. Issues like food safety, environmental sustainability, health and nutrition, affordability and accessibility have been all addressed differently and in isolation from one another. Isolated thinking can lead to unintended consequences. For example, fears about climate change led to the production of bio-fuels, which has been linked to increased food prices and concerns over the world's food supply. This concern came about partly as a result of sensationalist media. It was also influenced by a trend toward heeding the loudest stakeholder, or governments promising something to get elected. Sometimes, we allow myth and emotion to displace fact.

**The objective should be to determine how to create a virtuous circle. How do we develop affordable foods bolstered by a sustainable environment, people of a healthy weight, sustainable solutions, self-sustaining communities, and sustainable energy?**

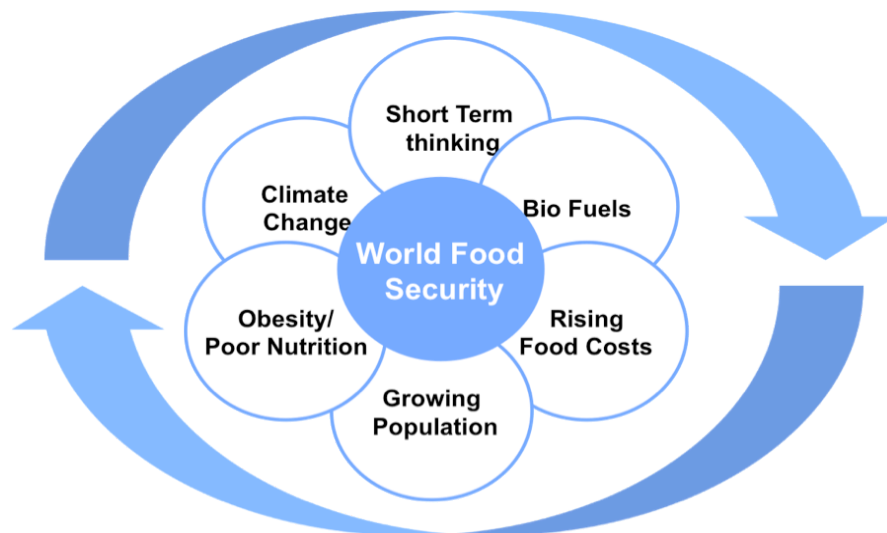


Figure 7. A virtuous circle of nutrition and sustainability.

**Potatoes play an important role in strategies to provide nutritious foods to the poor and hungry. It is one of the most sustainable crops in the world. It is also healthy.** For example, potatoes have more potassium than bananas. In the US diet, potatoes are the number one source of potassium and a significant source of fibre.

The challenge is to separate myth from reality. Demonizing French fries could threaten the potato industry and negatively impact diets around the globe. Frozen fries account for over 46% of total potato consumption. In 2009, potato consumption dropped significantly. In Canada, a reduction in consumption of French fries would be disastrous for farmers. Moreover, McCain uses local growers in Canada, and exports two-thirds of the potatoes it produces in Canada.

McCain realized it needed to gain the trust of consumers. So the company conducted a survey, which revealed that what consumers want the most, apart from food that tastes great, is for manufacturers to be open and transparent. Be truthful about what goes into your product. Provide the information, and let the consumer make the decision. This was the view of 88% of respondents.

### *Oven Chips*

McCain was convinced it could market healthy foods that consumers would appreciate. In the UK, McCain developed an oven-made French fry from two ingredients: potatoes and sunflower oil. The company marketed this product, and educated consumers about where the product came from.

This product development was part of McCain's effort to address standards and priorities recommended by regulators and nutrition advocates. McCain also undertook a public relations campaign with key stakeholders, such as the European Commission, the European Parliament, the UK Government, the UK Parliament, regulators and NGOs. The company also spoke to trade associations, commercial partners, media, employees, unions, and other parties such as teachers' associations and dietitians and nutritionists. The company reviewed the relevant food safety standards, worked with farmers on sustainability and traceability, and engaged stakeholders.

For McCain, an integrated solution is about being good people and a good corporate citizen. **This strategy has delivered impressive results. McCain credits its approach of openness and transparency, along with its education programs and good food, for driving an increase in its consumer-base by over 3 million customers between January 2006 and September of 2008.** The company is beginning to take the same approach in Canada.

## Cargill: Health and Agri-Food Strategy

### Mr. Len Penner, President, Cargill Limited

Mr. Penner described success stories where **his company has been able to market healthy products that can make health claims to consumers. He suggested that the industry can create distinctive value with healthy foods. He also stressed the need to collaborate.** He chose to give examples involving grain, but noted that the model could apply equally to the animal side or protein side:



**Snowbird wheat** is a hard, white wheat grown in western Canada. It comes from conventional genetics, and was brought to the market so that Canadian farmers would have a product that could compete with Australians in the Asian markets. The product has had an eight-year run, reaching one million acres under contract at the farm level. This was an example of a healthy product being developed and marketed abroad.

**Truvia** is a zero-calorie all natural sweetener. It has been in the US market for two years. It is produced from natural ingredients found in the leaves of the stevia plant that grows in China and Argentina. Production is contracted with farmers in these countries to ensure sustainable and socially responsible production. The fact that the product is a sweetener with no calories is the quality that launches a health claim.

**Green bread** comes from using “green” grain, specifically Eco-Grain wheat which is grown on farms in Idaho and milled for Sara Lee. Sara Lee’s EarthGrains bread is the first brand to use Eco-Grain. It involves growing wheat in a sustainable way using precision agriculture. It uses just enough inputs (fertilizer) to ensure a healthy crop. The claim is less energy, less emissions, and therefore a lighter carbon footprint. This is also an example of an identity-preserved product, where you know where it comes from and how it was produced from the farm to the retail chain. It is an environmental claim, which appeals to many consumers.

### *Canola Oil*

Mr. Penner’s fourth story was about Cargill’s Specialty Canola Oils. He characterized it as a complete value-chain story from research and development to a product on the shelf. The specialty canola oil is an edible oil with long term stability and zero trans fat. Knowing where it comes from and where it goes creates a “closed loop system” for the product. Currently, 1.5 million acres of this product is being produced in Canada and supplied to companies like McCain and McDonald’s, who use it as a trans-fat free source of oil. Cargill has 6,000 farmer partners working to produce this product. Creating this product was a 10-12 year



process. Mr. Penner suggested that the canola success story, which depends greatly on its health claim, can occur equally for other crops as well. But the process of getting an innovative product to market doesn't come cheap, and can take a long time, requiring a major commitment from the company. Such an investment can cost \$50 to \$100 million. Government regulations or food standards are a key motivation for the company to pursue a new product.

Mr. Penner noted that the technology to create this oil has been in existence for 20 years. But there was no economic value to producing it. Food processors did not see the value or could not extract incremental value from the consumer. Regulations changed that. Going to a trans-fat free environment was the spark that set this product in motion. **Still, the market is critical, regardless of the health claim. If the market doesn't exist, the product won't succeed no matter how strong its health claim.**

Mr. Penner reviewed the highlights to a successful new product launch. Collaboration is the key. They start with the food manufacturer or food retailer identifying significant long term consumer trends or changes in health regulations, then moving to the research and development community, the farm producer, grain handlers and processors, and finally the delivery of a consistent product back to the food manufacturer or retailer. A government regulation or a "burning platform" clearly helps. The industry must work together. For example, biotechnology is a critical component, and the quicker you can help the farmer produce a better quality seed using biotechnology, the quicker you get a valued product. Once this process starts, consistency of government regulations is also critical. The industry needs to know the government will be consistent, so that the product will have value.

Mr. Penner also stated that while agriculture has a key role to play in the healthy food opportunity, there is also a bigger challenge to positioning Canadian agriculture for a sustainable future. Canada is blessed with an abundance of productive land, far in excess of what it takes to feed 35 million people. Sixty percent of our agricultural production is exported annually and a healthy open trading environment is critical. Combined with the reality of a growing global population that by 2050 will be over 9 billion, this situation will require the world to double grain production to meet the food demand. That is the challenge – and also the opportunity – for Canadian agriculture.

Mr. Penner concluded in observing that there is clearly a benefit to understanding and building a stronger health link to agriculture. But that alone will not position agriculture for future success. To make all this happen successfully will require a significant collaborative effort.

**Mr. John F. T. Scott, President and CEO, Canadian Federation of Independent Grocers**

Canada serves amongst the safest food in the world, at the best prices, and in the most comfortable shopping environment.

The industry responds to the interests of the consumer, and consequently the consumer is the true driver of the market. There are four key consumer segments currently driving the industry: the baby boom, the elderly, the “echo,” and the ethnic consumer. Each segment affects the way in which a retailer goes to market and it is impossible to cater effectively to all segments. Universal consumer trends include an interest in health; Mr. Scott used several examples of the growth in product demand to identify those seen to have a health benefit. A sense of community is growing among shoppers; people have an interest in knowing the origin of their food.

**The market is changing.** It used to be that most stores competed for the middle class, while some shops catered to the very wealthy and a few to the very poor. But now we have a receding middle class, a dramatic growth in people who have a lot of money, and an even stronger growth in the numbers of people with very little disposable income that is unrestricted. This trend is much greater in the US than in Canada but strongly affects consumption patterns in each country. How do retailers market to this variation in consumers?

The recession has affected people regardless of their position in the economic scale. While the relative position has not changed, concern over the personal impact of the recession has resulted in a downward psychological pressure, which has been manifested in what a consumer buys in the market. Consequently, the value equation at this point in time is more heavily oriented to price and family value.

So what has grown? Two types of retailers are doing well in the recession: those who go to market as hard and soft discount (No Frills, Food Basics, Real Canadian Superstore and Walmart), and those at the high end. Retailers having to work harder are those that have traditionally catered to the middle class. These stores haven't lost customers; the customers are simply not buying the sophisticated, pricey foods anymore. The per-purchase basket size has decreased. For example, instead of buying a 25-pound turkey at Christmas, people are buying the 20-pound turkey. The retailer with the most success in today's economy would be one that can transcend the three types of economic consumer, although no one has an effective formula to achieve this end. Opportunities are evident in all components of this very competitive market.

## DISCUSSION AND NOTES ON THE “SUCCESS” PRESENTATIONS

- **Regulations** are needed to influence industry. The labeling program in the UK, for example, induces industry to manufacture healthier products.
- **Innovations in biotechnology** can be beneficial, but getting them accepted equally around the world is a big challenge. Every country has its own approach and timeline. Moreover, the innovations selected need to be those which consumers can understand, or else they won't be effective in changing behaviour.
- **Poor nutrients** must be eradicated from manufactured foods, including sodium, fat, and sugar.
- If industry is to make **health claims**, it must happen quickly. Government must get involved in determining such claims on a faster track.
- The food industry needs sound **science** to back it up. If the science is there, industry will cooperate. But industry needs the science to make the claims that generate profitable products. In Canada, the research and development funds needed to develop health claims are lacking. International collaboration is necessary. Nutrition scientists learn from one another and build on one another's work.
- We need to **solve the contradiction** between the need to make Canadians healthier — through exercise, diet, and reduced smoking — and the fact that Canadian agriculture does not produce the variety of food we need, and much of what we do produce is exported.
- **We need a vision** that sets out where we want to make progress. Then we focus on that area, and then we get buy-in from government. But we have to go to government with a clear vision of where the research and development must occur. Innovative products will follow from that vision.
- We could consider educating kids in schools, and educating teachers and doctors, about nutrition. **Nutrition should be added to the school curriculum.** The food served in schools and hospitals should be of better quality, while still tasty. Fast food establishments should be banned from the vicinity of schools and healthcare facilities. Junk food marketing should be banned, and junk food should be taxed. A healthy food campaign should be launched that promotes good eating. Grocery chains should be involved in this educational process. Governments, industry and health practitioners need to partner in this effort. Labeling laws should be reviewed so that labels can be less confusing to consumers, and so genuine nutritional claims of the product only are allowed.

## 7.0 THE VIEW FROM ABROAD

**Dr. Maurice Moloney, Founder & Chief Scientific Officer, SemBioSys Genetics Inc.; Chief Executive Designate, Rothamsted Research, BBSRC Institute, UK**



In the UK, food security and healthy food have become major issues, largely thanks to the Ministry of Environment, Food and Rural Affairs. In January 2010, the UK published its new food strategy, Food 2030 [<http://www.defra.gov.uk/foodfarm/food/strategy/index.htm>].

**The strategy's vision is one where: "Consumers are informed, and can choose and afford healthy, sustainable food. This demand is met by profitable, competitive, highly skilled and resilient farming, fishing and food businesses, supported by first class research and development."**

The agriculture sector remains, as it has since its inception, on a treadmill pushed by demands for ever-increasing efficiency and quality. In developing countries the focus is supply, and in developed countries the focus is on nutrition. By 2030, the world will have 9 billion mouths to feed. That is a daunting prospect for the food supply system, and it is by no means clear how this demand will be met.



**Figure 9. Food 2030 is the new UK food strategy.**

Today, agriculture faces a confluence of factors. One major factor is climate change. Warm weather means infestations, while cold weather means crops cannot grow. Another factor will be the loss of fossil-based carbon as a supply of fuel. Land limitation will be another big factor, as it is hard to conceive of expanding the agricultural land-base much more. To do so, we'll need to impede the rain forest, which is not a desirable option. The industry needs to confront the issue of sustainability, and whether intense farming is at odds with the environment.

**Food 2030 is the first attempt to genuinely integrate the processing and nutrition sides of the food system.**

The strategy is largely about determining how to:

- Have food that is both affordable and nutritious. The strategy focuses on food as preventative medicine. In the UK, poor diet is the cause of one-third of cardiovascular disease, many cancers, and a good deal of the diabetes problem. This all amounts to multi-billion expenses in healthcare. But as a means of prevention, food will only thrive if all the members of the value chain benefit from producing a product, from the producer to the retailer.
- Make the industry environmentally sustainable. Agricultural activity generates 15% of greenhouse gases worldwide. Meanwhile, on a global scale, 60 million hectares are being lost annually to soil erosion. New ways are needed to make agriculture productive without depleting major nutrients out of the soil.
- Integrate technology. Using current practices, the world cannot satisfy the need to feed 9 billion people. There are precedents in history for agricultural innovations that increase production, such as corn hybrids, and the development of inorganic fertilizer. To avoid a major melt down in the food supply, new innovations will be needed on an ongoing basis.

We need to develop incentives for people to choose healthier foods, and the value of education, so that kids grow up with a sense of nutrition.

It is not possible to achieve the necessary production goals by 2030 without global implementation of biotechnological strategies. Scientists will need to use all the technology available. Dr. Moloney also emphasized that these strategies will only come about through international partnerships, partnerships forged by technologically developed countries.

## **DISCUSSION AND NOTES ON THE “ABROAD” PRESENTATION**

- *In the UK, one ministry can take the lead. In Canada, agriculture is both a **federal and provincial responsibility**, which makes policy harmonization more complicated.*
- *A big issue with policies is getting **international cooperation**. The UK can believe in a certain policy, but needs to convince the Germans and the French, for example, of how a given policy provides benefits to them.*
- *If **new food solutions** are going to be needed by 2030, we have to get working on them now, because it takes 10 years just to get a product to market.*
- *Canada needs to foster **international partnerships** that include the US, UK, Australia, and other similar countries with similar challenges. They need to collaborate on strategic research, a framework document (like Food 2030), linking up with multi-nationals, and undertaking case studies and evaluations.*
- *The greatest achievement Summit participants could make is to develop policies that are simply so compelling that governments cannot refuse to adopt them. Canada has one of the most productive agricultural systems in the world, yet lacks **innovative policies**. Access to capital is one of the big problems. But we must find ways to add more value to our agricultural products.*



## 8.0 WHAT NOW? SYNTHESIZING THE FEEDBACK

### Dr. David Butler-Jones, Chief Public Health Officer, Public Health Agency of Canada



There is a desire for safe, affordable food. The difference between the 10 ounce pop and the 20 ounce pop today is a difference of 10 to 20 pounds per year. On the government side, **if regulations are a barrier to introducing healthier foods, it is essential to be clear on what particular regulation is the problem.** Dr. Butler-Jones noted that Canada has one of the lowest rates of investment in research and development.

### Ken Knox, President, Innovation Institute of Ontario



We need to respond to the data presented at the Summit, particularly the statistics suggesting that 90% of heart disease could be prevented by eating right, exercising, and not smoking. The solution involves policies that make people feel uncomfortable seeking out unhealthy foods. Social pressure is needed. **The Summit participants need to scope out a small number of key measures that can create this movement toward a healthier diet.**

### Marcel Ostiguy, Conseiller et administrateur de sociétés



Distribution is at the centre of the food industry. It controls everything. **If we want a health and agri-food policy in Canada, distribution and the people responsible for distribution need to be involved.** It will be impossible to make a policy on health successful without the cooperation of the retailers. They make the final decisions.

### Laurent Pellerin, President, Canadian Federation of Agriculture



It is inconceivable to oppose an integrated health and agri-food strategy. It only becomes difficult when we discuss how to make it happen. Producers are already confident in the health benefits of their products. The processing stage is where sugars and salts are added. **This is a whole-chain problem.** If the health factors are additives like salt then the focus needs to be at the processing stage. Another aspect of concern is quantity. North Americans eat too much food, because it's cheap. Retailers want farmers to provide it cheap, and then to capitalize on farmers' positive public image.

## DISCUSSION ON THE “WHAT NOW” PANEL

- The **medical community** needs to be involved in nutrition and health policies. For example, doctors shouldn't be shy to encourage people to improve their diet as a health measure that leads to weight reduction.
- The pharmaceutical industry is our competitor. Patients need to think that their **health solutions** require more than a drug.
- The solution starts with children, and a government campaign to get them to **eat healthier**. It is possible to eat healthy food that is tasty.
- There is far too much **junk food advertising** to children. Banning this advertising is a valid option.
- We need **common goals** set by multiple levels of government. The federal and provincial governments need to collaborate on education steps, such as creating a single website containing nutrition information on packaged foods. Consistent labeling is also needed. Consumers will support labeling that is agreed upon and which truly informs them of the nutrition value of products.
- An environmental scan needs to be conducted that: **assigns leadership roles**, investigates needs/requirements, identifies key stakeholders, identifies what consumers want, prioritizes achievable deliverables relevant to Canada, and identifies attributes and strengths to improve Canada's competitiveness.
- **Tobacco was a 25-30 year project**. We have to realize that nutrition will also be a long-term campaign.
- **A clear national vision** is needed that has all or some of these attributes:
  - specifies precise targets, like reductions in healthcare costs;
  - is delivered ready to go to the political realm;
  - has the support of a political champion;
  - includes a comprehensive, dynamic blueprint or action plan;
  - includes a team working toward a national vision;
  - is built around a national program to bring Canadians onside;
  - emphasizes prevention over treatment;
  - has an evaluative component;
  - is supported by coordination and network development;
  - uses the tobacco campaign as a template.

## 9.0 CLOSING REMARKS

### **Mr. Wayne Stark, CEO, Pursuit Development Labs Inc.; Co-Chair, CAPI Leadership Panel on Food and Wellness**

Some of the **major themes** that emerged from the Summit include:

**Producer:** The infrastructure is in place to produce healthier crops. Research is needed to follow a crop from the field right through the production chain to determine how it becomes an ingredient in a healthy product.

**Research:** Researchers are looking at practical ways to demonstrate the health effects of certain ingredients. The flax research conducted at the CCARM is an excellent example. The CCARM is conducting research that allows the healthy ingredient to be consumed through products people would naturally consume in the course of their lives. The significance of determining the health impact of a product is that industry needs to be able to make health claims to market a product.

**Consumer:** How do we bring great food into the lives of the Canadian public? By this, we mean kids, pregnant women, and all the people who not only want but require a healthy diet. It is worth considering ways of reaching people when they are at junctures in their lives, and when healthy eating may seem most important to them. That will help set them on the road to a healthy lifestyle. We need to find the natural transition points.

**Partnerships:** We have the mechanisms in place to make the transition to healthier eating happen, and it's largely through partnerships. We need to look at successful partnership models, and replicate them. What are the practical workable models? This will take a commitment, but it's a commitment well worth the effort.

### **Mr. David McInnes, President & CEO, CAPI**

Mr. McInnes described CAPI as an Institute set up to identify emerging issues. CAPI wishes to help drive the process to set up **a new food strategy for Canada**. The work ahead is to frame what we mean by a strategy. What are the opportunities, and obstacles, presented before us? We need to map out a plan that extends throughout the value chain, from seed to shelf.

Evidently, as the Summit has illustrated, operating models exist. We have seen examples of nutrition models, labeling models, public-private partnership models, and entrepreneurial models. Research models have also been illustrated. So, what can CAPI do? CAPI has set up a leadership panel of core people that the Institute will use to validate ideas. CAPI will **prepare a framing document** in the coming months. This process is timely, because the agricultural framework is set to expire

in 2013. The next 18 months are critical. CAPI will aim for a robust approach. We must engage government and the value chain in a fulsome way. CAPI will also develop key messages in clear language. The framing document and this clear-language approach will help us create a dialogue. Mr. McInnes thanked the participants for their feedback, and expressed the Institute's great appreciation for their participation.

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