

FOOD & HEALTH

ADVANCING THE POLICY AGENDA

WORKSHOP REPORT | MARCH 29 TO 30, 2010



**CHAIR OF AGRI-FOOD INNOVATION AND REGULATION
LAWRENCE NATIONAL CENTRE FOR POLICY AND MANAGEMENT**

Richard Ivey School of Business
The University of Western Ontario

IVEY

THANK YOU TO OUR EVENT PARTNERS:



TWO STRATEGIC PRIORITIES

Create a Canadian Food Strategy

The workshop's primary recommendation is to develop a Canadian Food Strategy that fully addresses the health of Canadians and the health opportunities for the agri-food industry. The strategy must include government policy, industry and nongovernmental organizations (NGOs).

Address Childhood Obesity

Childhood obesity threatens Canada's future. A 'whole of society' approach is needed to regain a healthy future for our children.

A Path to a Canadian Food Strategy

The first step toward creating a Canadian Food Strategy is selecting a steering committee that is objective, authoritative, open-minded, and representative of the stakeholders.

The steering committee should:

1. Develop a project plan.
2. Define a vision for the Future of Food in Canada.
3. Identify the major strategic priority areas. Select sub-committees for each strategic priority area.
4. Using sub-committees, identify objectives for each strategic priority area, strategies to achieve them, performance measures, the timeframe and responsibility for achieving objectives.
5. Identify cross-priority synergies and conflicts and the implications for policy and industry strategy.
6. Select the top strategic objectives and outcomes for a national food strategy. Agree on the targets, strategies and performance measures.

SIX STRATEGIES FOR HEALTH & ECONOMIC PROSPERITY THROUGH FOOD



1

Take a systems approach to food and health

Shift thinking beyond single nutrient components to complete diets and the interaction of those diets with demographics and lifestyle. While comprehensive approaches are needed, there are opportunities to tailor solutions to sub-populations and individuals through nutrition and nutrigenomics.



2

Develop solutions at the societal level

Involve stakeholders from industry, governments, and NGOs to develop policies and strategies which create stronger food/health relationships. Improve communication between government agencies to enable collaborative solutions. Society-wide initiatives are needed to create an environment of change.



3

Support research

Research is key to better understanding the relationship between food and health. It also provides the basis for health claims, informing consumers about the benefits of healthy food products. Research advances both health and economic prospects for agricultural and food sectors.



4

Understand consumers' relationship with health

Create strategies for change based on actual consumer behaviour. Make eating healthy the easy choice by building health information and messaging systems consumers understand.



5

Make healthy foods accessible

Access to healthy foods is vital for people across regions and economic conditions. Healthy and affordable options must be available to *all* Canadians.



6

Link health strategy with business strategy

Health is both a responsibility and an opportunity. Decisions to develop new products, improve existing ones, or enter new markets should include a consideration of health impacts.

TABLE OF CONTENTS

DIRECTORS' MESSAGE	4
SETTING THE CONTEXT	5
A FRAMEWORK FOR FOOD & HEALTH	6
PERSPECTIVES FROM TWO MINISTRIES	
George Zegarac: Deputy Minister, Ontario Ministry of Agriculture, Food and Rural Affairs	8
Bob Stark: Deputy Minister, Ontario Ministry of Health Promotion	10
SESSION 1 PUBLIC HEALTH OPPORTUNITIES	
A Systems Approach To Food	11
<i>Kim Elmslie, Centre for Chronic Disease Prevention and Control, Public Health Agency of Canada</i>	
Food, Health and Policy Options	12
<i>Dr. John Millar, Provincial Health Services Authority, British Columbia</i>	
Targeting Healthy Eating: The Implications of Demographics and Nutrigenomics	14
<i>Dr. Allan Paulson, Dalhousie University and AFMNET</i>	
Translating Research Into Products	15
<i>Dr. Grant Pierce, Canadian Centre for Agri-Food Research in Health and Medicine</i>	
SESSION 2 LEARNING FROM OTHER JURISDICTIONS	
Food and Health Policy Cases: British Columbia and Quebec	17
<i>Martine Pageau, Ministère de la Santé et des Services sociaux du Québec</i>	
<i>Mary Collins, BC Healthy Living Alliance Secretariat</i>	
Bridging The Gap	21
<i>Anne Kennedy, Food Regulatory Issues Division, AAFC</i>	
SESSION 3 HEALTH AND FOOD OPPORTUNITIES ALONG THE VALUE CHAIN	
Consumer Preferences and Health	24
<i>Colin Siren, Ipsos Forward Research</i>	
The Business of Healthy Food	25
<i>Dr. David Sparling, Richard Ivey School of Business</i>	
Giving Consumers the Health Information They Need	27
<i>Dr. Keith-Thomas Ayoob, NuVal Scientific Advisory Board and Albert Einstein College of Medicine</i>	
The Need For A National Strategy	28
<i>Nick Jennery, Canadian Council of Grocery Distributions</i>	
BREAKOUT GROUPS	
Breakout 1: National Food Strategy	30
Breakout 2: Childhood Obesity in Canada	31
CREATING A CANADIAN FOOD STRATEGY	34
List of Attendees	37
Acknowledgements	39

DIRECTORS' MESSAGE

DR. DAVID SPARLING and DIANNE CUNNINGHAM

On behalf of the Richard Ivey School of Business, Agri-Food Innovation and Regulation @ Ivey, and the Lawrence National Centre for Policy and Management, we extend our sincere thanks to everyone who contributed to the organization and success of *Food and Health: Advancing the Policy Agenda*.

In planning this workshop, we endeavoured to create a neutral forum where a wide range of experts could share their knowledge and vision. To ensure that this initiative would lead to relevant and practical recommendations, the Steering Committee undertook extensive consultations to identify the most pressing issues and then carefully developed the workshop's discussion topics.

Our report builds on the recent workshops held by the McGill World Platform for Health and Economic Convergence and the Canadian Agri-Food Policy Institute. Canada is facing a chronic disease crisis. It has become apparent over the course of these workshops that although food and health have a complex relationship, healthy food must be part of the solution.

Speakers at *Food and Health: Advancing the Policy Agenda* addressed strategies for developing and implementing effective policies to improve the health of Canadians through better food and food choices. Participants had a meaningful discussion on critical issues such as advances in the understanding of health, research and development leading to new and healthier products, the importance of labelling and consumer awareness, and the role of industry, media and government in affecting what Canadians choose to consume. In addition to speaker-led sessions, two breakout teams discussed the need for Canada to establish a national food strategy and to address childhood obesity.

As a result of these informative presentations and discussions, this workshop report outlines two strategic priorities: to develop a holistic and inclusive National Food Strategy for Canada that creates a strong vision for a healthier nation; and to develop a coordinated Childhood Obesity Reduction Plan to decrease obesity rates in children by 25% within the decade and 50% within 20 years. This report then proposes six strategies for health and economic prosperity through food. These strategies include taking a systems approach to food and health, developing 'whole of society' solutions, supporting research, understanding consumers' relationship with food and health and using that understanding to positively change behaviour, making healthy foods more accessible and building health considerations into business strategy.

Eighty committed representatives from business, government, nongovernmental agencies, academia and students came together to share their knowledge and perspectives on strategies for developing and implementing policies to improve the health of Canadians through better food and food choices.

We recognize that this report is one link in a larger chain. It is up to governments to implement policies and to set the pace of action by supporting ongoing research and policy advancement. Only through collaboration will we be able to provide the leadership necessary to create a healthier Canada.



Dr. David Sparling



Dianne Cunningham

SETTING THE CONTEXT

Canada is facing a health crisis. Activity levels are falling. Caloric intakes are rising. Our nutrition profiles are out of balance. Increasing incidence of chronic disease and skyrocketing healthcare costs threaten to overwhelm provincial budgets.

The problem can be traced to a complex combination of food and lifestyle choices. However, the problem is not insurmountable. It is possible to change course, but remedies must include a mixture of government, industry and social strategies. Although real solutions require long-term plans, there are immediate opportunities for coordinated and directed steps forward.

“WE NEED A PARADIGM SHIFT.
THERE IS A CRISIS, BUT THE PROBLEM IS
THAT WE DON’T YET FEEL IT.”

- NICK JENNERY

The relationship between food and health primarily affects two groups: consumers and food producers. Consumers are affected by the food choices they make. Those choices determine the economic performance of Canada’s agriculture and food producers. Although food and health are intricately linked, the same cannot be said for food and health policy. Historically, food and health policies have been developed in isolation and the result has often been policies which send conflicting messages and delay healthy food innovations. This approach must end. An expanding body of research has provided new models for linking food and health, shifting the focus to prevention rather than treatment. To date, Canada has not been able to capitalize on this research. We must improve if we want effective government policy and industry strategy that reinforce the connection between food and health.

The Richard Ivey School of Business was an active participant in recent food and health forums organized by the McGill World Platform for Health and Economic Convergence and the Canadian Agri-Food Policy Institute. The purpose of our *Food and Health: Advancing the Policy Agenda*¹ workshop was to continue the push towards developing a national strategy linking food and health. The workshop brought together Canada’s leading experts to develop an action plan for advancing the food and health policy agenda.

Workshop sessions began with an examination of the health opportunities and progressed to industry and policy action.

1. **The Health Opportunities:** What are the major health issues that can be affected by food consumption patterns? How should we approach the problems? What policy levers can be used to address food and health? How can we translate food/health research into results?
2. **Policy Options and Experience:** How can regions organize themselves to tackle health issues related to food? What are the programs and strategies available? How can stakeholders and government agencies collaborate more effectively?
3. **Industry Responses to Food and Health:** What are the challenges and opportunities related to food and health and their impact along agri-food value chains? How can we engage consumers, who will be critical to creating new food and health models?

The breakout sessions allowed participants to discuss select issues with others, focusing on elevating the thinking and identifying strategies. Although an extensive list of topics was generated during the day, participants ultimately focused on two strategic priorities: developing a Canadian Food Strategy and tackling childhood obesity.

¹ March 29-30, 2010 in London, Ontario

A FRAMEWORK FOR FOOD & HEALTH

DR. DAVID SPARLING

The relationship between food and health is complex. It involves a myriad of players and influences. The framework outlined here highlights many of the policies and industry strategies that can affect food and health. It also recognizes many of the realities that complicate the change process.

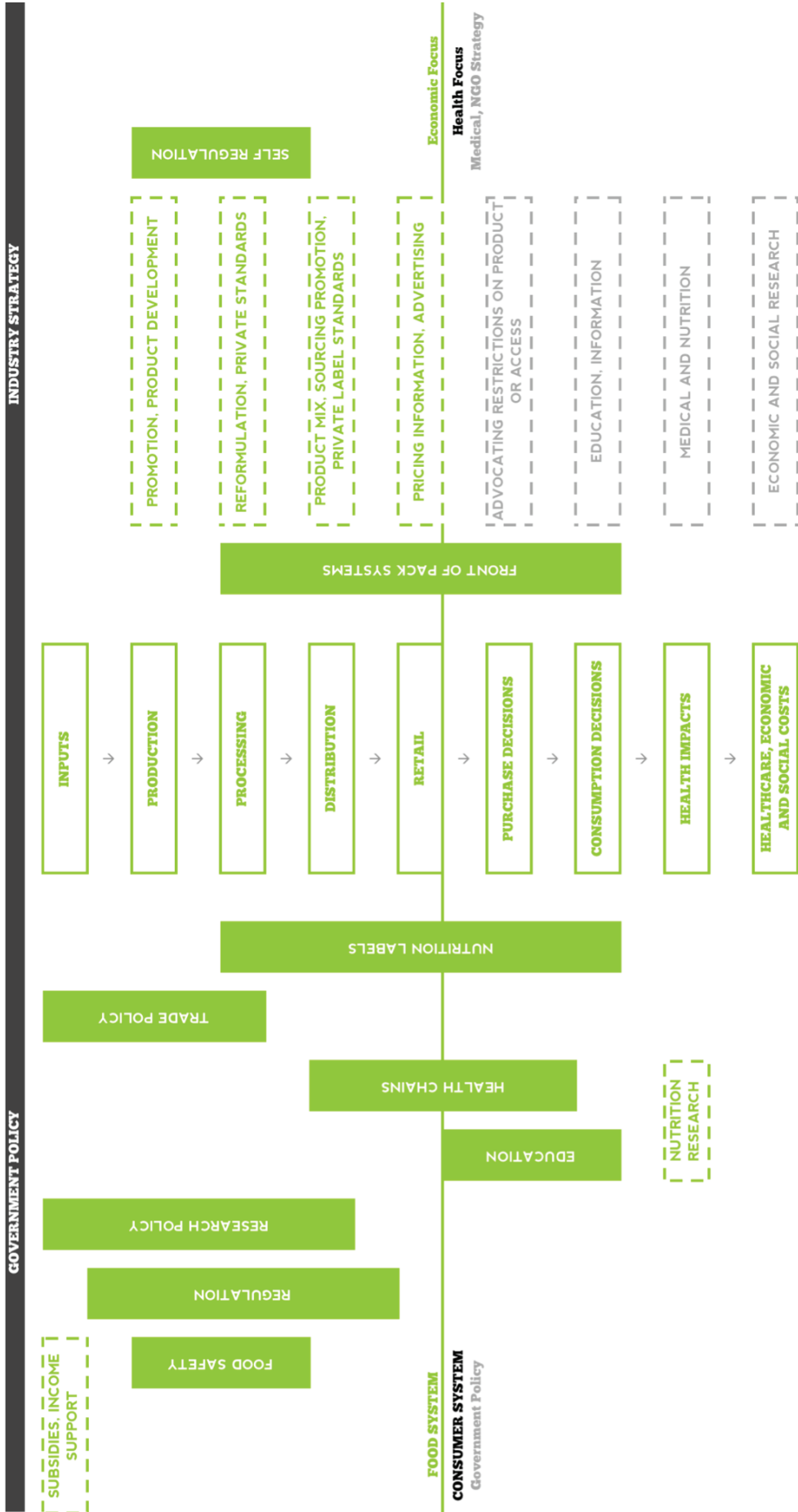
First, food and health decisions occur in two very different environments. One, the food system, deals with the production, distribution and sale of food. The other addresses the consumption of food – what and how much – and the impacts of that consumption on individuals and society. The food system is focused on economic returns, developing, producing and selling products to consumers. The consumer system confronts the complexity of influencing consumer behaviour, recognizing the potential disconnects between household purchase decisions, frequently made by one family member, and consumption decisions made by individuals. The objectives and time frames of the two systems are distinct. While economic impacts can be felt in a very short time, health outcomes become apparent only over the long-term. Still, the more closely the objectives of both systems can be aligned, the more likely both economic and societal health objectives will be achieved.

Food and health can be viewed from two perspectives using the framework. The health perspective begins at the bottom of the figure with a specific health objective such as reducing heart disease or hypertension. The process moves upward through the framework considering the possible policy options and industry strategies for affecting that objective through consumer education and decisions, food product offerings, labelling, or formulation as well as for research, regulation and policy. The process identifies the key impact points and the players who can help achieve the objective. This perspective involves a host of different products and strategies, all aimed at a single health outcome.

The food industry perspective begins with a crop or food product that has the potential to affect health, positively or negatively, and focuses on the strategies needed to maximize the benefit to the industry (or minimize the cost). This perspective focuses on economic impact and moves downward through the framework, identifying the strategies and policies that can support capturing the economic opportunity.

Both perspectives recognize that many players are involved, each with their own objectives. Although government has been treated as a single entity, in reality it includes players from municipal to federal jurisdictions across a host of ministries. Each has its own policy levers. Private sector farms, firms and industry associations, a variety of NGOs and the medical/nutrition community play critical roles through individual and collective strategies. Individual action is unlikely to achieve results, so organizations must identify allies and create opportunities, building momentum towards much needed change.

Long-term improvement, either social or economic, will not occur because of a single policy change or even by resolving the tensions between food and health policy. It will require private-public partnerships implementing a host of different strategies to create a sustainable improvement in the health of Canadians. The path includes a series of small steps, each with measurable and achievable goals. We hope that our workshop deliberations and recommendations will prove to be a giant step as we continue to work together with governments in the timely development of a Canadian Food Strategy fully addressing health and health opportunities for the agri-food industry.



PERSPECTIVES FROM TWO MINISTRIES

George Zegarac

Deputy Minister, Ontario Ministry of Agriculture, Food and Rural Affairs²

Ontario is facing a health crisis as the incidence of chronic diseases continues to rise. Many chronic diseases are due, at least in part, to food.

The costs of chronic disease to society are massive – lost productivity, lower quality of life and rapidly rising health care outlays. Ontario's health care costs reached 46% of the province's total operating budget – \$44.6 billion - in 2008-2009 (Figure 1). By 2022, they are projected to reach 70%. Moreover, the number of Ontarians over 65, the most frequent users of the healthcare system, is expected to double to 8 million over the next 20 years. At the same time, childhood obesity has tripled since 1981.

Agriculture, food and health have a complex relationship. While their goals are convergent, programs and policies have been developed in isolation. Programs should be mutually supportive and must involve both government and external stakeholders. Figure 2 identifies Ontario's perspective on the pieces needed to solve the food for health puzzle.



Deputy Minister George Zegarac

Ontario has initiated several programs that create the opportunity for change through strong multilateral collaborations. These include:

1) Northern Fruit and Vegetable Pilot (NFVP) Program, a program which delivers fresh fruit and vegetables to 12,000 students across 60 schools in Northern Ontario. The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), the Ontario Ministry of Health Promotion (MHP), the Ontario Fruit and Vegetable Grower's Association (OFVGA), Health Units, and school boards are involved in the development and implementation. Each partner plays a role. For example, the OFVGA buys and distributes the fresh produce (96% of which was grown in Ontario in 2008-2009).

“WE NEED TO BUILD OPPORTUNITIES FOR AGRI-FOOD AND HEALTH POLICIES AND PROGRAMS TO CONVERGE AND BE MUTUALLY SUPPORTIVE.”

- GEORGE ZEGARAC

2) OMAFRA's Foodland Ontario and the Ministry of Health Promotion's EatRight Ontario are in partnership to cross-promote their activities. Foodland Ontario promotes Ontario-grown foods, providing recipes, food storage and preparation information, nutritional information, and resources for children. EatRight Ontario provides information on nutrition and healthy eating. Ontario residents can call a toll-free number to speak with a registered dietitian.

² On June 2, 2010, George Zegarac was appointed Deputy Minister, Ontario Ministry of Children and Youth Services.

Ontario recognizes the importance of knowledge and research to create solutions to food/health challenges. Research provides an important underpinning for food and health, increasing our understanding of the relationships but also developing healthier food products. OMAFRA has created a 'Food for Health' research theme and has funded 86 projects through the University of Guelph.

OMAFRA Research Agreement and other programs since 1999. The agri-food industry - including producers, processors, and industry organizations - is also taking steps towards developing innovative healthy foods, creating healthier food products through research and reformulation.

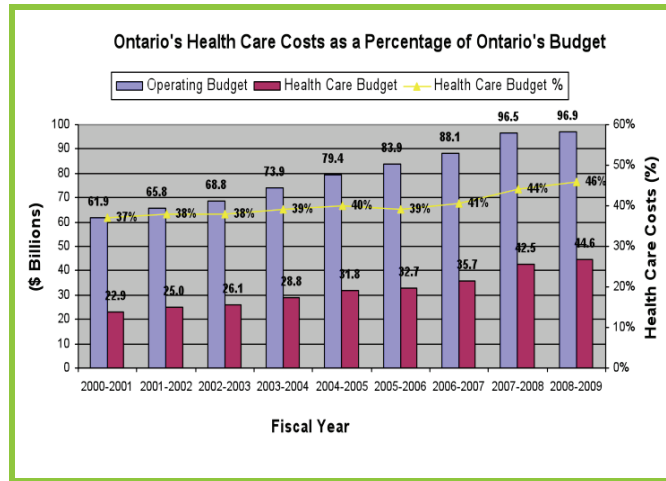


FIGURE 1. Ontario's rising health costs.

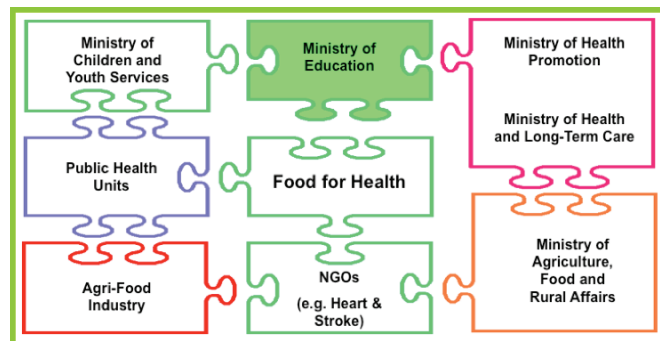
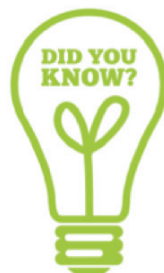


FIGURE 2. Solving the Ontario food and health puzzle



Obesity and physical inactivity cost Ontario's health care system an estimated \$4.3 billion annually – The Ontario Collaborative Group on Healthy Eating and Physical Activity

Bob Stark

Deputy Minister, Ontario Ministry of Health Promotion³

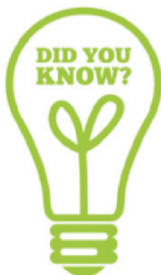
The Ontario Ministry of Health Promotion's vision is of healthy communities and Ontarians leading healthy and active lives. The Ministry aims to champion health promotion across Ontario, inspiring its partners to create a culture of health and wellbeing.



Deputy Minister Bob Stark

The need for dedicated health promotion is clear – only 51% of Canadians are active enough to benefit their health, 1 in 3 deaths in Canada are due to heart disease and stroke, and more than 5 million Canadians have high blood pressure. All of these conditions are lifestyle-related.

What needs to change? Diet and activity prevent between 30 and 40% of all cancer, and research suggests that 90% of type 2 diabetes and 80% of coronary heart disease could be avoided through healthy weight maintenance, regular exercise, eating healthy food, avoiding smoking and drinking moderately.



86% of children in Ontario don't meet the physical activity guidelines recommended in the Canadian Physical Activity Guide – CANPLAY study, 2009

According to the World Health Organization, 5 action areas are required for health promotion: building healthy public policy, strengthening community action, re-orienting health care towards prevention, developing personal skills, and creating supportive environments. The Ministry of Health Promotion is building partnerships to create the necessary change, with organizations such as the Dietitians of Canada, Heart & Stroke Foundation, Boys and Girls Clubs of Canada, the Canadian Cancer Society, and the YMCA. The results are evident in new programs – for example, the Ministry's EatRight Ontario program which provides reliable nutrition information for families and health care providers via phone or web and its collaboration on the Northern Fruit and Vegetable Pilot Program.

The Ministry sees itself working with its partners towards healthier foods for all Ontarians – in particular, less salt, less fat, more nutritious food, more consumer information, and less advertising targeted towards children. To achieve these goals requires collaboration and dedication from the participants in this workshop and other representatives throughout health, health promotion, agriculture, NGOs, and communities.

The Ministry seeks to better understand and influence the wide range of factors that shape the health of individuals and communities. It wants to ensure that Ontarians have healthy choices and can protect their health. The Ministry wants people to make the connection and understand how making healthy choices on the foods they buy and consume, in combination with daily physical activity, can improve their health and prevent disease.

“What are the next steps? We need less salt, less fat, less sugar, proper portion sizes, coupled with fewer advertisements for unhealthy foods.”

- BOB STARK

³ As of June 2, 2010, Judith Wright was appointed Deputy Minister, Ontario Ministry of Health Promotion.

SESSION

1

Objective

Understanding the issue - What are the public health challenges and opportunities for improvement through food?

Outcomes

Food and Health Requires a Systems Approach

Research Must be Supported

In this session

- Kim Elmslie describes why food is about more than nutrients and vitamins.
- Dr. John Millar clarifies the growing health care and chronic disease crisis.
- Dr. Allan Paulson emphasizes that different communities require different healthy food strategies.
- Dr. Grant Pierce documents how research is vital for encouraging people to make better choices.

A SYSTEMS APPROACH TO FOOD

KIM ELMSLIE, DIRECTOR GENERAL FOR THE CENTRE FOR CHRONIC DISEASE PREVENTION AND CONTROL, PUBLIC HEALTH AGENCY OF CANADA

Choosing the right level for analysis is important. In the past, policy makers and scientists have focused chiefly on components of food, for example, vitamins and nutrients. Simple relationships exist between vitamin deficiencies and certain disease outcomes (such as insufficient Vitamin C causing scurvy). These outcomes, from a health standpoint, can be easily remedied through increased intake of the necessary vitamin or nutrient. Most research funding has also been directed at food components. However, vitamin and nutrient deficiencies no longer dominate public health concerns. Chronic diseases, such as diabetes and cardiovascular disease, are now a priority as their incidence is increasing across the Canadian population. The causes are a complex function of many interacting factors and the old approaches no longer work. We need to redefine 'dietary intake' to reflect these new complexities.

We can look at food/health relationships at five key levels, all of which influence our overall nutrition and risk of chronic disease:

- 1.** Food components – includes vitamins and nutrients.
- 2.** Foods – what foods are available and which consumers choose.
- 3.** Food groups – such as fruits, vegetables, dairy and whole grains.

“WE NEED A FORUM IN WHICH ALL STAKEHOLDERS CAN VOICE THEIR OPINION TO ENSURE TOPICS, SUCH AS BENEFICIAL BACTERIA, MAKE THEIR WAY INTO THE RESEARCH FOCUS OF OUR SCIENTISTS.”

- DR. GREGOR REID

4. Dietary patterns – how much or how little people consume.
5. Other lifestyle/environmental determinants.

Moving along the levels from basic food components towards lifestyle/environmental determinants, we develop a more complete picture of 'dietary intake.' Of these levels, food groups and dietary patterns are most consistently related to chronic diseases. Without a complete definition of 'dietary intake,' and solutions which take a society-level approach, public policy will remain ill-equipped to fight the increasing incidence of chronic disease.

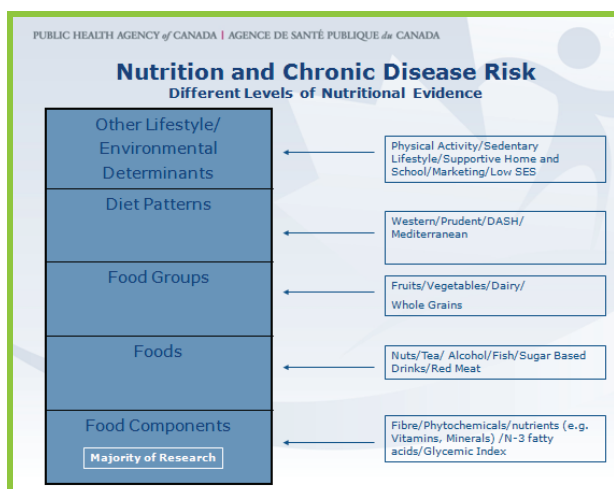


FIGURE 3. Nutrition and chronic disease risk.

In line with the current – albeit outdated – preoccupation with food components, most product labelling emphasizes nutrients information. Nutrient information, in the absence of clear health guidelines, gives consumers a false sense of security in thinking they have selected healthy foods. A customer will select a food product based on the abundance of certain nutrient, but in reality, nutrients are only part of the overall picture. Further, cultural barriers exist – in our society 'more' is deemed to be better. Together, these challenges threaten to inhibit positive action against chronic diseases and obesity.

FOOD, HEALTH AND POLICY OPTIONS

DR. JOHN MILLAR, EXECUTIVE DIRECTOR OF POPULATION HEALTH SURVEILLANCE
FOR THE PROVINCIAL HEALTH SERVICES AUTHORITY IN BRITISH COLUMBIA

Pervasive obesity and chronic disease are threats to Canada's population health, health care sustainability, as well as productivity, competitiveness, and growth. Costs incurred for treatment of chronic diseases and obesity are substantial. Projections for BC are that health care spending will outstrip revenue growth, leaving little for programs except health care and education by 2017 (Figure 4 on next page).

Increased rates of obesity are caused in part by our ‘obesogenic environment,’ the product of sedentary lifestyles and the food produced and consumed. Too many non-nutritious calories are produced and sold at lower prices than healthy alternatives. The objective must be for businesses to profitably produce healthy foods that health-conscious consumers will buy. Policies that can be used to tackle the issue range from fiscal and regulatory mechanisms to social marketing and community programs designed to create the social change needed to support healthier lifestyles. The government can use a number of levers to help direct health and food policy, including:

1. Fiscal – use production and sales taxes to discourage the consumption of unhealthy foods; use subsidies to encourage industry to grow fruits and vegetables
2. Advertising Bans – ban advertising of unhealthy foods to children
3. Education/Social Marketing – focus on school programs to educate children on how to eat healthy but also how to prepare food
4. Food Systems – preserve good agricultural land to protect the supply of food; develop farm to school programs and subsidized distribution food mail for remote regions. There are opportunities for self-regulation to address food/health issues and these may be more attractive than regulatory approaches
5. Provide understandable nutrition information through standardized labelling practices and national ‘healthy foods’ standards. First, we need to agree on what constitutes healthy food.



Sugary drinks are one of the major sources of empty calories, particularly for children. The BC Pediatric Society and the Heart and Stroke Foundation have launched an elementary school education program to teach children in grades 4-6 about healthy beverages.

<http://www.bcpeds.ca/sipsmart/>

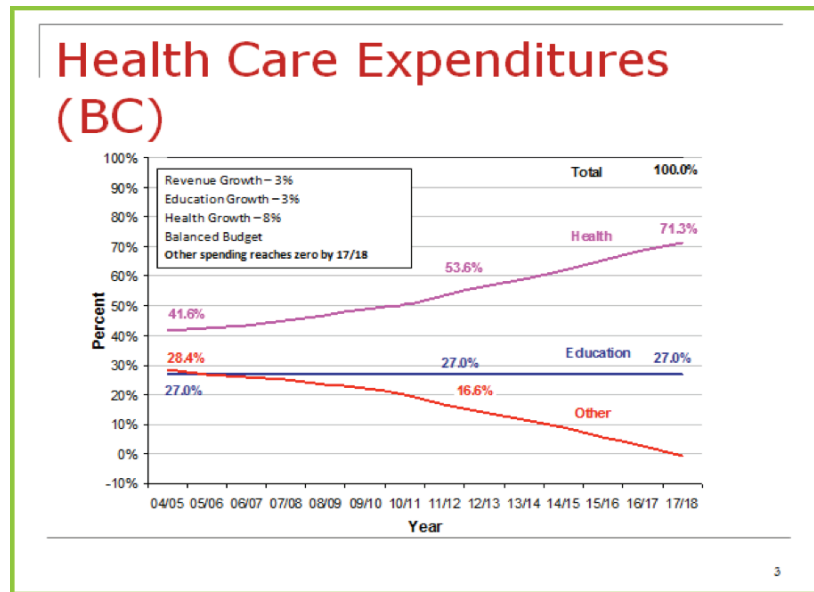


FIGURE 4. Nutrition and chronic disease risk.

TARGETING HEALTHY EATING: THE IMPLICATIONS OF DEMOGRAPHICS AND NUTRIGENOMICS

DR. ALLAN PAULSON, DALHOUSIE UNIVERSITY AND AFMNET

Different communities require different healthy food strategies. One of the challenges for nutrition in the future will be Canada's aging population. Seniors are growing in number and will put a strain on health care systems. They have special nutrition needs and more research is required to understand the impact and implications of nutrition on the health of seniors.

In the future nutrition strategies must move beyond populations to individuals since different people respond to different nutritional strategies. Individualized strategies will be possible through the power of nutrigenomics, matching nutrition to individual genomic characteristics.

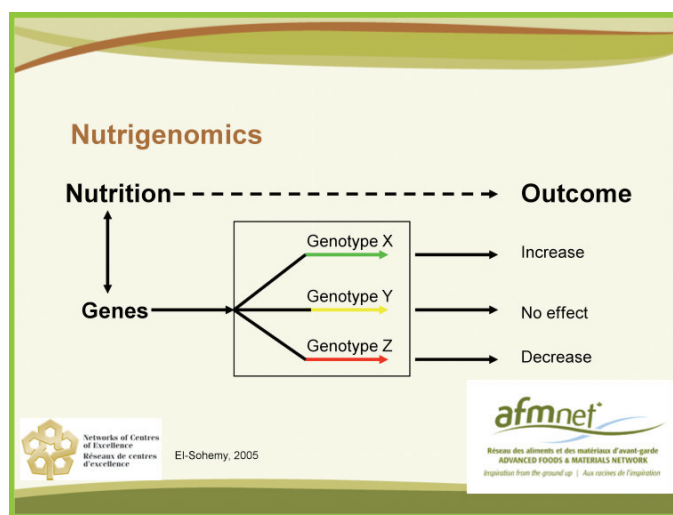


FIGURE 5. Opportunity for targeted nutrition through genomics.

THE STATISTICS ON THIS FOOD-RELATED CHALLENGE ARE DAUNTING. CANADIANS CONSUME TWICE THE RECOMMENDED SALT DAILY, 80% FROM PROCESSED AND RESTAURANT FOOD. 17,000 CASES OF STROKE AND HEART DISEASE FROM EXCESS SODIUM ADD \$430-\$540 MILLION PER YEAR IN DIRECT HEALTH CARE COSTS. REDUCING SODIUM LEVELS IS A CHALLENGE SINCE SALT PROVIDES BOTH TASTE AND FUNCTION IN MANY FOOD PRODUCTS; WITHOUT SALT BREAD WILL NOT RISE AND MANY PROCESSED SOUPS AND FOODS WILL TASTE BLAND.

Building on these opportunities requires an understanding of the needs and roles of agri-food value chains. Canada's agri-food industry is strong and in a position to benefit from the food and health opportunities and to play a leadership role in addressing the challenges. The agri-food industry produces 8% of Canada's GDP and roughly 12% of employment. It is backed by a strong research capacity in Canada's universities, government laboratories and Centres of Excellence.



By 2025 there will be more than 1.2 billion seniors in the world, double the number in 2002.

These industry and government capabilities will be important in addressing challenges like salt and sodium reduction in Canada. The statistics on this one food-related challenge are daunting, and so is the challenge of reducing sodium levels. Salt provides both taste and function in many food products; without salt bread will not rise and many processed soups

and foods will taste bland. Reducing salt levels requires a combination of research, reformulation and re-educating consumer palets to accept lower levels of salt (and often taste). How can we maintain functionality and taste without the negative health implications?

Creating a healthier food supply may require investment in new systems, like traceability. If we expect consumers to make informed, healthy decisions, we must assure them that the information provided is reliable. Inadequate traceability poses safety risks.

Science is bringing new health opportunities to the food industry. In 2008, about two-thirds of American consumers made some effort to eat fortified foods. Many bioactive compounds have health benefits but some tend to taste unpalatable. So, how can we incorporate more bioactives into meals? Once we do, what can we tell consumers?



DNA testing shows that 25% of fish are mislabeled in restaurants and supermarkets.

Source: Robert Hanner and Eugene Wong, Food Research International, 2008.

TRANSLATING RESEARCH INTO PRODUCTS

Dr. GRANT PIERCE, CANADIAN CENTRE FOR AGRI-FOOD RESEARCH IN HEALTH AND MEDICINE

The options for addressing chronic diseases are limited. Poor diets and lifestyle lead to obesity which, in turn, leads to chronic diseases. Our choices to combat obesity are:

1. Eat less
2. Exercise more
3. Eat healthier
4. Continue to use cosmetic surgery

Research can play an important role in encouraging people to adopt healthier diets by providing them the information that they need to make better choices. If we expect farmers and food companies to produce healthy foods and consumers to consume them, we need consensus on what constitutes healthy foods. A clear definition of healthy foods supported by research will inform consumers and allow them to make healthier choices.

The agriculture industry is a major element of the health equation, and one that stands to benefit from an increasing focus on health. If demand for a crop (for example, blueberries) directly relates to its health benefits then as demand for the crop increases – driven by the knowledge provided to consumers – consumption and price for that crop will also increase. Farmers will profit from

“AGRICULTURE AND HEALTH HAVE A SYMBIOTIC RELATIONSHIP. WE IGNORE ONE ONLY AT THE EXPENSE OF THE OTHER.”

- DR. GRANT PIERCE

health-conscious consumers while consumers benefit from healthier foods.

This logic has guided Agriculture and Agri-Food Canada (AAFC) to create the Canadian Centre for Agri-Food Research in Health and Medicine (CCARM) in Winnipeg. The CCARM combines the study of health and crops in a research model unique in several ways:

- 1.** It is located in a medical research setting at the St. Boniface Hospital and the University of Manitoba. CCARM is a formal agreement (~\$32M) establishing a unique association between AAFC, St. Boniface Hospital (a tertiary care teaching hospital) and the University of Manitoba.
- 2.** Its research spans 'bench to bedside' in one institution; that is, the centre performs activities along the entire gamut from animal testing to clinical trials.
- 3.** CCARM has regulatory capacity for foods and trials; long-term clinical trials that are essential for Health Canada's health claims process.

To illustrate the CCARM's ability, consider the Centre's research into the relationship between flaxseed and cardiovascular disease (CVD). The hypothesis was that flax, a major Western Canadian crop, will decrease risk of CVD due to its omega-3 fatty acid content. The CCARM conducted a 16-week trial in which they supplemented rats' diets with flax. They found flaxseed, in animals, greatly improved vascular relaxation, suggesting a decline in the risk of CVD.

From their animal testing, the CCARM extended their testing to humans. The Centre currently oversees FLAXPAD, a 1 year double blinded, placebo controlled, randomized clinical trial that is the first to examine the effects of flaxseed on primary end-points in a patient population with CVD. CCARM organizes participants, supplies the food products for the study and analyzes the results to provide new knowledge on the flax/health relationship and support a health claim for flax regarding CVD.

When it comes to food and health there are three key messages:

- 1.** You are what you eat
- 2.** You don't know what you are if you don't know what you are eating
- 3.** Medical research is the obligatory starting point to stimulate a change in what we eat, what we are, and how we change our disease patterns in this country

Ultimately, we have a choice to make: either invest in research now to make people healthier or pay for elevated health care costs in the future.

**“NUTRITION IS ONE OF THE MOST IMPORTANT
WEAPONS IN OUR PREVENTATIVE MEDICINE
ARSENAL.”**

- DR. GRANT PIERCE

SESSION

2

Objective

Taking action – What can we learn from the experiences of other regions and agencies?

Outcomes

Solutions at the Societal Level Are Most Effective

In this session

- Martine Pageau outlines how Quebec's commitment to improved health and policy developed in response to a decline in the health of Quebecers.
- Mary Collins spells out the British Columbia Healthy Living Alliance's mission to improve the health of all British Columbians.
- Anne Kennedy observes that meaningful change can only occur via government and industry collaboration.

FOOD AND HEALTH POLICY CASES: BRITISH COLUMBIA AND QUEBEC

MARTINE PAGEAU, MINISTÈRE DE LA SANTÉ ET DES SERVICES SOCIAUX DU QUÉBEC
MARY COLLINS, DIRECTOR, BC HEALTHY LIVING ALLIANCE SECRETARIAT

Quebec and British Columbia illustrate two different approaches to food and health policy. Both provinces have pursued actions to align health and food in a way that fosters healthier living among their citizens. The approach and the elements differ in some ways, but offer many similarities.

LESSONS | WHO LEADS?

There is no single formula for who should lead healthy society initiatives, as long as the process includes the right players. Governments must be involved but they do not have to lead. In Quebec, the government took the lead but in BC an alliance of several BC not-for-profits – including the Heart & Stroke Foundation, the Cancer Society, the Lung Association, and others – took a leadership role to advise policy makers on actions needed to improve the health of BC citizens. BCHLA acts as a lobby group yet is also involved in public awareness, service delivery, and community development.

Motivation

British Columbia

The BC Healthy Living Alliance was formed by nine NGOs in 2003 to combat the increasing incidence of chronic disease in BC. People with chronic conditions represent approximately 34% of the BC population.⁴ BC's commitment to host the 2010 Winter Olympics pushed both the Alliance and the province into action. With the prospect of hosting the international community, BC wanted its population to be a healthy example. The provincial government established ActNow BC and subsequently the Ministry of Healthy Living and Sport to encourage British Columbians to make healthier choices. As part of its portfolio, the Ministry oversees the government-wide health promotion initiative, ActNow BC.

Quebec

Quebec's commitment to improved health and food policy developed in response to the overwhelming amount of data suggesting an increase of the burden of obesity and other chronic diseases. Quebec recognized that the proliferation of chronic diseases throughout its population posed a serious burden on the province's health budget. Further, the province cited obesity as major contributor to chronic diseases. Research shows obesity can help explain: 51% of cases of type 2 diabetes, 32% of the cases of hypertension, and 18% of the cases of coronary diseases. Therefore, reducing obesity levels became the aim in Quebec's fight against chronic disease.

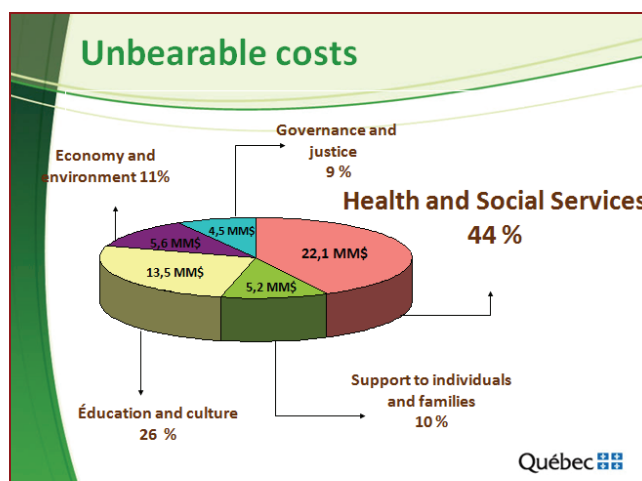


FIGURE 6. Costs of health care in Quebec.

Vision and Mission

BCHLA

The BCHLA's mission is: "to improve the health of all British Columbians through leadership and collaboration to address the risk factors and health inequities that contribute significantly to chronic diseases." This statement implies that the BCHLA will base its recommendations on an evolving understanding of the causes of chronic diseases.

Quebec Ministry of Health and Social Services

Quebec's Ministry of Health's mission is: "to improve the quality of life of Quebecers by creating environments that foster healthy lifestyles, especially physically active lifestyles and healthy eating." This mission statement is more specific and establishes that physically active lifestyles and healthy eating are the best means to improve the health of Quebecers. The

⁴ BC Ministry of Health Services, 2008/09 Annual Service Plan Report, pg. 11.

statement also posits that an environmental approach, one that involves changing social norms, is necessary to encourage desired lifestyle choices.

Areas of Focus

British Columbia

The BCHLA identifies three key areas that must be addressed to achieve a healthier BC population:

- 1.** Health Promotion and the reduction of inequities in health among the population of BC
- 2.** Food and Health Public Policy – BCHLA cites BC's Agricultural Plan as a first step in aligning health and agricultural agendas. Part of the plan's focus is to ensure the agricultural and food sector significantly contributes to the health of British Columbians; one element of the strategy to achieve this goal involves encouraging the production of local foods
- 3.** Obesity Reduction – an effective strategy will look at the entire value chain; production, transformation, distribution, access, and consumption

Quebec

Quebec's plan targets mostly youth (from birth to age 25) and their families. The plan has five main tenets with 75 different programs:

- 1.** Foster healthy eating habits (21),
- 2.** Foster a physically active lifestyle (26),
- 3.** Promote positive social norms (10),
- 4.** Improve services for people with weight problems and better control of weight loss products (10),
- 5.** Promote research and knowledge transfer (8).

In line with these focal areas, Quebec has launched promotion campaigns to encourage healthy eating, set up voluntary programs for restaurants to increase fruit and vegetable offerings, and supported the enforcement of a law prohibiting commercial advertising to children under 13. To accomplish its mission, the Ministry of Health actively engages other governmental departments and NGOs. Currently, the Ministry works with seven departments – Health, Agriculture, Education, Family, Work and Social Solidarity, Transport, Municipalities – and three NGOs – the National Public Health Institute, the Youth Secretary, and the Consumer Protection Office – to advance its aim.

Recommendations

British Columbia

Through input from its member base and research, the BCHLA recently made a submission on *Tackling Overweight and Obesity in BC* to the provincial government including the following recommendations:

- 1.** Restrict marketing of unhealthy food and beverages to children;
- 2.** Create national guidelines or a system of nutrient profiling for food and beverages;
- 3.** Introduce standardized national 'front of pack' and menu nutritional labelling to help consumers identify foods that are high in fat, sugar and sodium;
- 4.** Introduce mandatory nutritional labelling on all food service establishment menus;

- 5.** Improve access to healthy foods in remote and rural communities;
- 6.** Set targets and timelines for the food and beverage industry to drastically reduce the amount of sodium, fat, sugar and sugar content in foods;
- 7.** Introduce healthy living curricula to schools, including areas such as food system knowledge, differentiating healthy and unhealthy foods and beverages, and food preparation skills;
- 8.** Introduce a substantial tax on all sugar-sweetened beverages;
- 9.** Support local food production – community gardens, agriculture reserves;
- 10.** Create a dialogue with industry and NGOs to promote healthy food and healthy eating;
- 11.** Develop social marketing campaigns to increase public understanding of healthy eating, working with NGOs and communities.

These recommendations require the buy-in and cooperation of various levels of government as well as industry and the not-for-profit sector. The BCHLA will continue to work with government and industry to create meaningful change and improve the health of British Columbians.

Quebec

Quebec views the environment as a key determinant of dietary and lifestyle choices. Therefore, action must occur at multiple levels involving stakeholders from both industry and government. Based on prior experience, Quebec's Ministry of Health thinks that a broad mobilization involving multiple sectors at multiple levels is the best model to achieve the desired results. A comprehensive framework must be created to facilitate the extensive coordination required among stakeholders. Ultimately, these partnerships must produce good food policies for healthy eating, defined as, "policies that intervene or draw on some aspect of the food supply chain to create a healthier food environment." To achieve a healthier population, food policy should make healthy choices easy. This involves increasing the nutritional value of food offerings as well as the frequency of these offerings.

A framework for cooperation and encouragement of public-private partnerships attempts to overcome the following challenges:

- 1.** Coherence among measures and policies,
- 2.** Consumers' perceptions of policies (don't want to create environment of food prohibition),
- 3.** More involvement of the agri-foods partners,
- 4.** Continued research, monitoring, and evaluation,
- 5.** Sustain commitment.

Both BC and Quebec feel that their efforts are already starting to have an impact. Creating real change will require long-term commitment from all stakeholders.

BRIDGING THE GAP

ANNE KENNEDY, ASSISTANT DIRECTOR OF FOOD REGULATORY ISSUES DIVISION,
AGRICULTURE AND AGRI-FOOD CANADA

Bridging the gaps between government agencies and between government and industry is a challenge when trying to create society-wide change. To ensure meaningful change takes hold, government and industry must collaborate. A recent initiative at Agriculture and Agri-Food Canada (AAFC) offers an example of how industry and different government ministries can successfully work together to address challenges. AAFC's Growing Forward Agricultural Policy Framework aims to enhance the competitiveness of the agri-food industry. The Agricultural Regulatory Action Plan contributes to this goal by addressing the regulatory challenges to sector innovation, investment, and competitiveness.

Health claims are an effective way to provide consumers with good information to make healthy purchasing decisions, but Canada has a very limited range of permissible health claims. Moreover, the process to obtain a health claim has been extremely slow and costly. Business leaders cite examples of firms taking their healthy food products to international markets, by-passing Canada as an unattractive investment. This represents lost opportunities for consumers and food producers alike.

**"THERE NEEDS TO BE IMPROVED
RECOGNITION OF THE CRITICAL ROLE
AGRICULTURE PLAYS IN HEALTH, AND VICE
VERSA."**

- ANNE KENNEDY

MAKING PROGRESS

The long and complex regulatory approval process has often been cited as a barrier to innovative firms. AAFC's Food and Regulatory Issues Division was created to mitigate Health Canada's resource constraints and overcome communication barriers between the agri-food industry and Health Canada. AAFC is working closely with Health Canada to enhance the efficiency of the regulatory approval process in four key areas:

1. Minor Use Pesticides
2. Veterinary drugs
3. Voluntary fortification of foods with vitamins and minerals
4. Health claims, novel foods, and ingredients

Businesses want to label foods with health claims to provide consumers with health information and to differentiate their products. Health Canada sets the standards that determine the validity of health claims. The Food Regulatory Division of AAFC works with businesses and Health Canada to increase the efficiency health claim approvals. The Food Regulatory Division undertakes a range of support activities working with other divisions or ministries:

1. AAFC Market & Industry Services:
 - Identify issues and analyze impacts (for example, trans fats, sodium, allergens)
 - Collaborate with sectors on plans, regulatory priorities, preparation of submissions, and identifying research gaps
 - Education and outreach on regulatory requirements

2. AAFC Research Branch:

- Undertake and coordinate research to fill gaps in evidence to substantiate new health claims around foods; this is exemplified by the Canadian Centre for Agri-Food Research in Health and Medicine (CCARM) discussed by Grant Pierce

3. Health Canada Food Directorate:

- Enhanced policy frameworks, standards and regulations to respond to technology and innovation
- Improve efficiency of pre-market approval process
- Develop guidelines and supporting material (for example guidance documents)

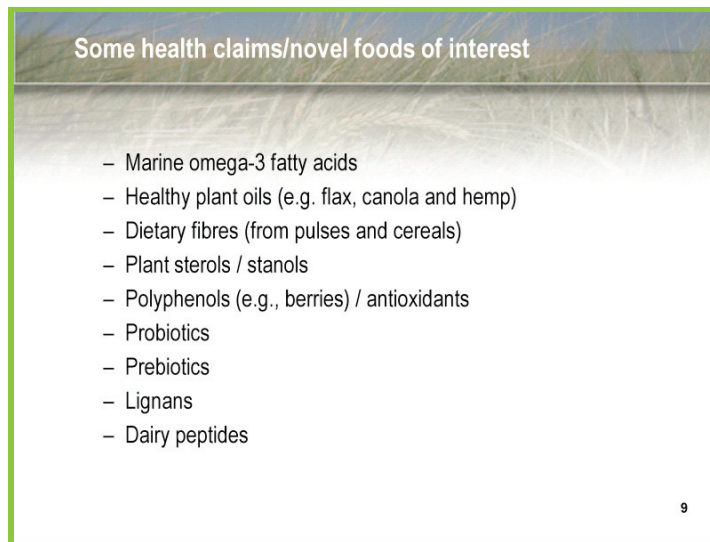


FIGURE 7. The Food and Regulatory Issues Division is working on a number of health claims and novel foods. Foods with health attributes are growing globally at a rate of double that of food products overall. If businesses can scientifically verify their health claims and have them efficiently approved, they can attract higher prices for their products. This will in turn stimulate investment in Canada's agri-food sector to the benefit all Canadians.

Overall, AAFC seeks to be involved in many aspects along the food value chain. The Food Regulatory Division performs the following key activities:

1. Analysis of Industry Issues

- The department works with stakeholders to identify emerging regulatory issues and provides input to interdepartmental committees and working groups on issues impacting food industry. AAFC also advises on a variety of regulatory issues that affect the food industry. This includes: GE labelling, BPA, Acrylamide, Mycotoxins in grain, Irradiation, Codex, WHO, QUID, and others.



45% of processed foods launched in 2008 contained health and nutrition messaging (up from 31% in 2002).

2. Facilitation of Industry Plans and Priorities

- AAFC facilitates information-sharing and multi-disciplinary expert research groups to help develop industry plans/priorities. They also develop decision-making tools for sector groups and small and medium enterprises (SMEs) to assess market viability and economic and scientific readiness

for health claim submissions. Finally, AAFC collaborates with sector groups to identify products with specific potential health attributes suitable for pursuit of a health claim.

3. Support Industry with Submissions

- The Division provides advice, technical support and research to help sector groups navigate the regulatory process for a particular claim or product. AAFC also helps to identify and share best practices in areas of scientific consensus related to health claims, novel foods, and ingredients. Finally, they provide input to improve the usefulness of guidance documents, submission templates and other resources generated by Health Canada.

4. Sector Outreach

- AAFC has committed to developing an electronic list service to facilitate information sharing and updates and a web portal for the Growing Forward Regulatory Action Plan. It will include information on Health Claims, Novel Foods, Ingredients initiative, etc.

This program provides an excellent example of cross-ministerial collaboration and creative problem solving. AAFC recognized the impact of delayed approvals on the agri-food industry and employed a non-traditional yet economically sound approach – i.e. provide resources to coordinate with Health Canada and to help clear the backlog of applications – to addressing the problem.

SESSION

3

Objective

What can and should industry do?

Outcomes

Convert Health Strategy into Business Strategy

Link Consumer Behaviour to Health

Make Eating Healthy Easy

In this session

- Colin Siren illustrates what consumers really want when they buy food and consumer perceptions around food, health and weight.
- David Sparling examines policies and industry strategies for capitalizing on health and food linkages.
- Keith-Thomas Ayoob explains how the NuVal nutrition scoring system helps consumers make informed decisions.
- Nick Jennery highlights the systemic challenges which must be overcome to take advantage of the food and health opportunity.

Health is both a challenge and an opportunity for the agri-food industry. It requires a value chain perspective to create social and economic benefits. The major social benefit is a healthier population with correspondingly lower health care costs and higher quality of life. Economic benefits would arise through new products, higher sales, and potentially higher prices in the industry. Still, it all begins and ends with the consumer. We must first understand how consumers are changing in order to identify how products, messaging, and communication can enable the industry to meet consumers' demands.

CONSUMER PREFERENCES AND HEALTH

COLIN SIREN, ASSOCIATE VICE PRESIDENT, IPSOS FORWARD RESEARCH

In recent years we have witnessed the proliferation of product labels, an increase in food and health activism, as well as the growth of functional and “super foods.” Although the incidence of chronic disease continues to grow, there is clearly a demand from some consumer segments for increasingly nutritious foods and better information. Beyond affordability, value, and safety, consumers expect convenience, environmental consciousness, and perhaps most importantly, benefits to their health.



FIGURE 8. Food attributes consumers are demanding.

However, there may already be too much of a good thing. Many consumers suffer from a paralysis of choice. When shoppers look at grocery shelves and see a host of similar products with tiny nutrition labels and confusing ingredients, they are unable to distinguish between healthy and unhealthy foods. This is a significant challenge for consumers wanting to make quick, healthy food decisions. Given the current condition of food labelling, consumers cannot be expected to know what is and is not good for them when comparing multiple items in a single food category.

Ipsos Forward Research, a public opinion research firm, has conducted research on Canadian consumers' attitudes and behaviour as they relate to food. The firm has found that 53% of Canadians view themselves as being overweight, where their actual weight status (based on BMI) indicates that 30% of Canadians are overweight and 30% are obese. In addition, Canadians often know that they should be eating better (34%) but many are reluctant to take action. These findings demonstrate the critical need for fitting healthier food products into consumer consumption patterns.

Promoting a “make it healthy” lifestyle may improve Canadian health statistics. To do this we must:

- Acquire an in-depth understanding of consumer segments and their level of engagement with health (age groups, income levels, gender)
- Foster an understanding of behaviour and motivators for change in each segment
- Identify priority targets
- Create action plans based on segment characteristics

THE BUSINESS OF HEALTHY FOOD

DR. DAVID SPARLING, CHAIR OF AGRI-FOOD INNOVATION AND REGULATION,
RICHARD IVEY SCHOOL OF BUSINESS

Canada has an enormous potential to produce new healthy products and to capitalize on the health properties of the crops and food produced here. There is an opportunity to create economic benefits for the industry and health benefits for society. There is a range of policy options to address different factors in the food and health relationship. As illustrated in Figure 9, economic and health impacts differ significantly.

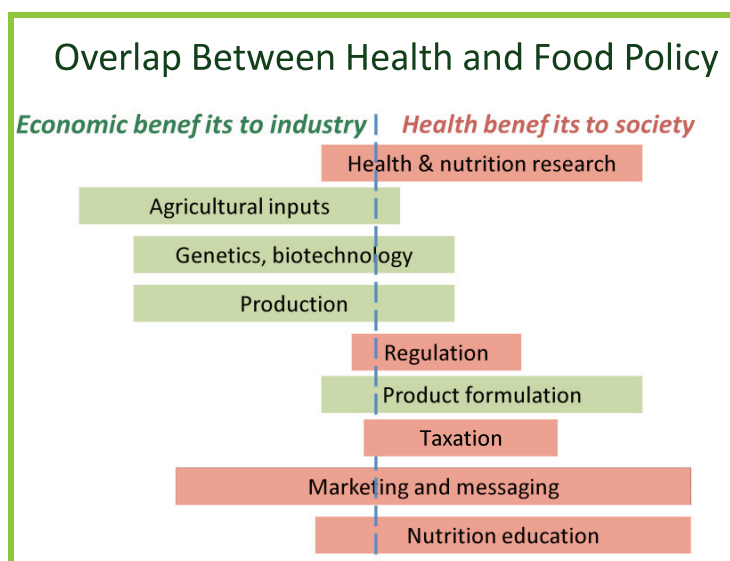


FIGURE 9. Overlaps exist between health and food policy.

Marketing and messaging can i) help farmers and food companies differentiate their products and ii) help consumers make healthy food choices. Media plays a significant role in translating research into information for consumers. Communicating food and health information via newspapers, web, radio and television results in increased demand by consumers. Case studies by Agri-Food @ Ivey on blueberries, soybeans, DHA milk and pulse crops concluded that there is high value in communicating product health stories.⁵ Nonetheless, the messaging needs to be easily understood in order to influence consumers. Developing these key messages is an ongoing challenge and an important hurdle to overcome.

Case studies of four health food innovations yielded several recommendations for creating economic opportunity from health attributes.

- 1. Both policy and industry strategy are essential.** Success in each case depends on a combination of government policy and active industry involvement.
- 2. Research matters.** Research may be government's greatest contribution. It helps identify new relationships between food and health, provides evidence via clinical trials, improves productivity and health attributes of crops and allows us to understand consumer decisions.
- 3. Understand and communicate the health opportunity.** Define the value proposition for consumers and create focused messaging.
- 4. Understand the steps from opportunity to commercial reality.** Define the gaps, the path to market and the characteristics of the final product. How will it compete on form, health, taste, price or distribution? What is the technology strategy?
- 5. Partners are essential.** Each of the cases involved partners, but those partners and their roles varied. The 'right' partner for a situation could be industry (up or down the value chain), government, academia, or an NGO and may change depending on the stage of development.
- 6. Streamline regulations and reduce inter-provincial barriers where possible.**
- 7. Industry strategy and leadership are key drivers of success.** From research to industry development and marketing, industry associations are the main organizations converging on new opportunities. Industry champions provide the energy and focus to propel a new healthy food product to its full potential.

⁵ <http://www.ivey.ca/agri-food>

GIVING CONSUMERS THE HEALTH INFORMATION THEY NEED

DR. KEITH-THOMAS AYOOB, CHAIR, NUVAL SCIENTIFIC ADVISORY BOARD AND ASSOCIATE CLINICAL PROFESSOR, ALBERT EINSTEIN COLLEGE OF MEDICINE

Food is medicine, but eating should also be enjoyable. Food is one of the most important tools to help us lead healthier lifestyles. However, consumers are faced with a huge variety of choices. Keeping up with the latest nutrition information and choosing between different food options is a daunting task. NuVal helps consumers decipher the nutritional content of food by offering a single measure of nutritiousness for a given product. The NuVal scoring system helps consumers circumvent the need to decode confusing nutritional information found on labels by providing a simple score from 1-100.

NuVal's system examines both the positive and negative components of food and adjusts for factors such as fat and energy levels (Figure 10). The resulting score is particularly useful in helping consumers select from products within a product category.

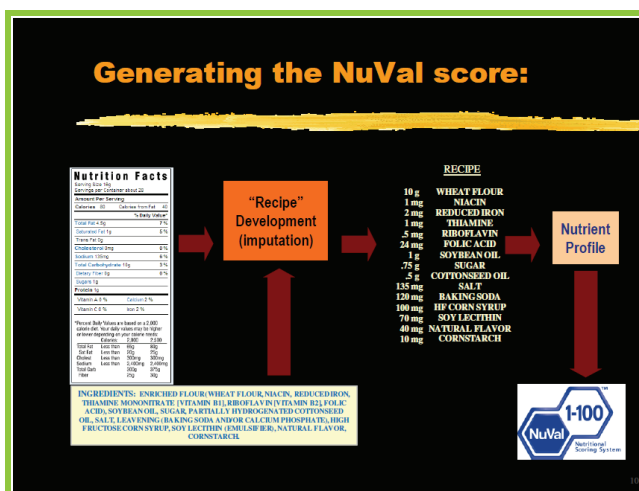


FIGURE 10. NuVal calculates a score from 1-100 based on a nutritional algorithm.

The objective of this new system is to assign a nutritional score, as a single number displayed on shelf tags, for every food in the market. There appears to be support from consumers for this information – researchers have found that the presence of the NuVal graphic leads to higher purchase intent versus a product that does not show the icon, even in combination with a manufacturer’s nutrition symbol. The NuVal system has also been shown to be highly consistent with other health indicators.

The NuVal System offers several benefits, including:

- **Inclusive** – It covers all kinds of food – from apples to chips and store brands to national brands – not just products from specific manufacturers
- **Convenient** – It is right where you shop – on shelf tags throughout the store – so you can compare overall nutrition the way you compare price

- **Objective** – It was developed independently by a team of nutrition and medical experts and funded by Griffin Hospital. No retailers or manufacturers were involved
- **Value-focused** – It helps you get the most nutrition for your money by allowing you to compare price and nutrition side-by-side on the same tag

The scoring system offers benefits to other groups as well. It provides a means for health care, government, consumers and industry to work together to improve the nutritional profile of food. It allows industry to better meet consumer demands and to understand the impact of changes that they make to food products. One strength of NuVal's comprehensive approach is that it does not reward positive changes in one area if they are counterbalanced by negative changes in another, such as might be the case if low fat status was achieved by increasing sugar levels. It assists retailers in tracking changes and shifts in consumer purchases related to health and it allows gradual yet meaningful dietary improvements on the part of consumers.

“WE NEED MORE NUTRITION PER DOLLAR AND MORE DOLLARS FOR NUTRITION.”

- DR. KEITH-THOMAS AYOGB

THE NEED FOR A NATIONAL STRATEGY

NICK JENNERY, PRESIDENT AND CEO, CANADIAN COUNCIL OF GROCERY DISTRIBUTORS

Canada's retail sector is responding to consumer demand, and recently consumers have become more interested in health. They are also confused by the many different labels and messages that they have to process. We must educate consumers and ourselves with increased messaging and research.

“EVERYTHING BEGINS AND ENDS WITH THE CONSUMER.”

- NICK JENNERY

The industry is being hampered from fully developing its health potential. The process from new product idea to a commercially successful product is long and costly. Several challenges limit Canada's ability to capitalize on the health opportunity, including:

- Regulation of health claims is a significant impediment in the process
- Product development regulatory process is too slow, taking between 18 and 36 months. The market and consumer “desire” are way ahead
- Regulatory compliance and enforcement are blunt instruments that prevent targeted solutions
- Food labelling is a challenge for food companies and consumers

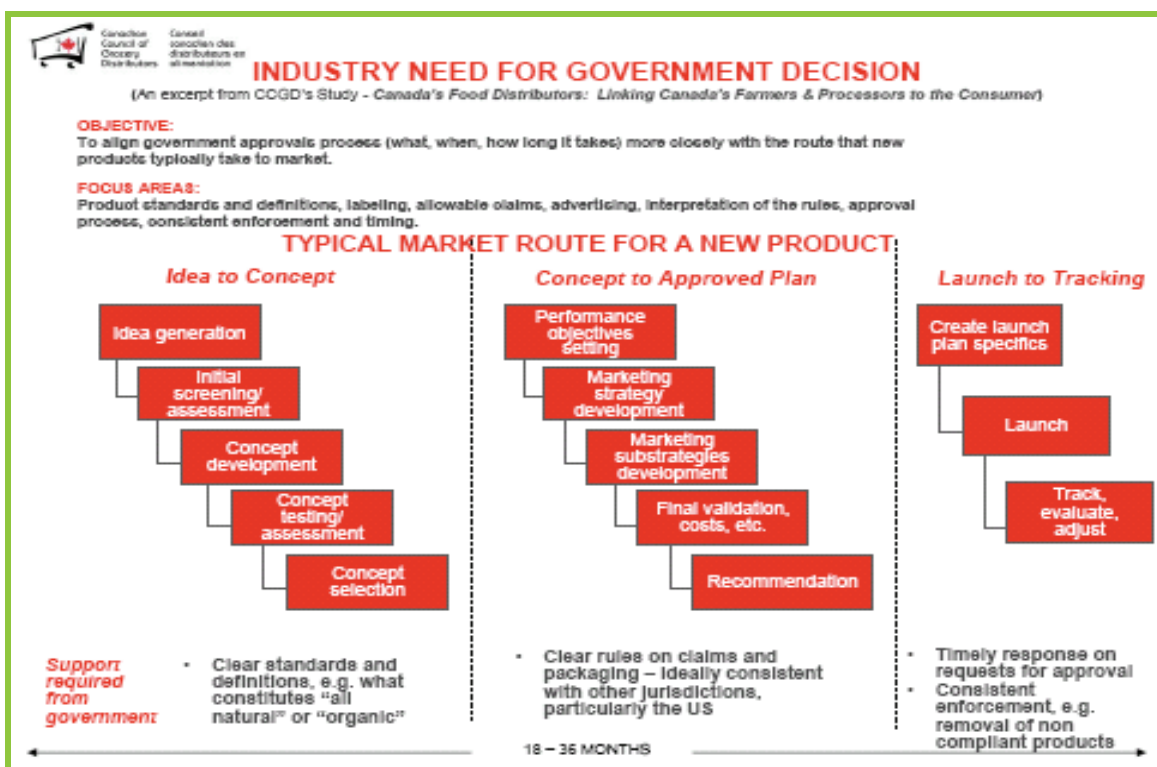


FIGURE 11. Creating a new food product.

The food and health challenge is just one important issue facing the industry, but it is the one which can motivate change. Now is clearly the time to create a National Food Strategy that includes health, but also ensures a profitable and sustainable agriculture and food industry. That strategy must clearly define the future of the industry with a clear vision and goals, metrics to measure progress and templates for action.

The recently announced UK food strategy, *Food 2030*, provides an excellent template for a national food policy strategy.

Food 2030 includes six pillars around which the strategy is built.

1. Encourage consumers
2. Profitable and competitive industry – balance the needs of eaters and feeders
3. Sustainable production
4. GHG reduction
5. Waste reduction
6. Increasing research, technology and skills

Canada can learn from this model in terms of both outcomes and the process used to engage stakeholders and build consensus. Both government and industry must be engaged and we will need champions to build support in industry and government.

“ELIMINATING AS LITTLE AS 100 CALORIES PER DAY PER PERSON IN THE UNITED STATES CAN REDUCE THE COST OF HEALTH CARE BY 58.7 BILLION DOLLARS A YEAR.”

- DR. JAMES ASTWOOD

BREAKOUT GROUPS

Objective

Identify the highest priorities for participants and determine the next steps.

Many issues were raised during the three sessions. We asked workshop participants to identify the areas that were most important. Participants identified two key themes for the breakout groups: creating a National Food Strategy and addressing Childhood Obesity.

NATIONAL FOOD STRATEGY

BREAKOUT ONE

Canada needs a national food strategy that takes into account the holistic and systemic nature of food and its interactions with people and the planet. We would like to see this strategy created over the next year to form a vision for Canada and identify the roles for government, industry, researchers, and NGOs in creating a healthier nation. The timing is right - not only because of ever-increasing health problems, but also because there is a need to inform the development of upcoming policy initiatives. The federal and provincial agriculture and food ministries' Growing Forward II framework for 2013-2018 is being discussed now. The Canada Health Accord expires in 2014 as well. While there is a need to inform policies and acknowledge political timelines, we must also think longer-term. Finding solutions to chronic diseases through improved nutrition requires a paradigm shift for industry, government, and consumers.

What will this strategy look like? The strategy must help Canada compete in a global market, and focus on the interface of food and health. Success must be measurable in terms of both improved health and economic outcomes. While it should be consistent with private sector value creation, it is unreasonable to assume there will not be any downside for industry, consumers, or government – the current rates of production and consumption of healthy food is unsustainable, meaning that change is inevitable. However, there are opportunities to focus on rewards-based initiatives rather than punitive ones, and to shift the mindsets of both industry and consumers towards longer-term considerations.

“ONE OF OUR GOALS SHOULD BE CONSUMERS WHO ARE INFORMED AND CAN SELECT AND AFFORD HEALTHY, SUSTAINABLE FOOD.”

- NICK JENNERY

While the strategy should be national in focus, global factors must be taken into account. The food market is global, and Canada plays a major role in this market. So, it is critical to consider the global implications of our actions on trading partners. We also need to be aware of accessibility issues at home. Healthy food is often more expensive than unhealthy

foods on a per calorie basis, so alternatives may need to be devised which enable better access to healthy foods. An education campaign, along with support for accessibility, will help inform consumers as to the nutritional value of foods. A National Food Strategy for Canada will need to consider:

- How to achieve healthier populations
- Sustainability in industry
- Integrated budget plans, linking AAFC and Health Canada, and addressing issues between federal and provincial jurisdictions
- Different and better technology
- Greenhouse gas emissions
- Personalized nutrition
- Flexibility
- Access for everyone
- Education campaign

How can we create this strategy? First, we need not reinvent the wheel. We must look to other jurisdictions, for example, the UK's *Food 2030* process. Identifying lessons for Canada from both the outcomes and the processes used by the UK, Scotland, and New Zealand in creating plans for food and health will allow us to advance more rapidly. We must also recognize that different paths work for different nations. For example, while the UK employed a top down approach, Canada may want to employ a more industry-driven bottom up approach.

In this new model, we must bring all stakeholders to the table and they need to work together to leverage synergies rather than put up roadblocks. Real transformation does not happen without real commitment. The Ministries of Health and Health Promotion, Education, and Agriculture along with industry, NGOs, and researchers must identify their role and contribute accordingly.

Goal

Create a Canadian Food and Health Strategy by December 2011 that outlines a vision for the future along with roles for various stakeholders.

- This strategy should be developed through consultations with industry, government, researchers, NGOs, and consumers.

CHILDHOOD OBESITY IN CANADA

BREAKOUT TWO

The issue

Canada has an obesity epidemic. The statistics are startling. Obesity is a key factor in 51% of type 2 diabetes cases, 32% of the incidences of hypertension and 18% of coronary disease diagnoses. Problems associated with extreme weight generate significant economic costs to the Canadian economy as well. More than \$5 billion per year is lost due to obesity-related health complications. Yet, even though the economic burden of obesity is significant, some of the most severe

consequences are private. Reductions in quality of life, increases in stress and mental health issues can all be attributed to Canada's obesity scourge.

The problem is especially acute in children. Habits are formed in childhood, particularly food consumption and physical activity behaviours. More importantly, obese children become obese adults. Childhood obesity is a symptom of poor diet and health practices. It is caused by a lack of healthy food options, insufficient physical activity, inadequate meal planning and unavailable nutrition and health information. Policy is needed to change Canada's obeseogenic environment. Programs are required to reduce Canada's childhood obesity rates.

"WE NEED TO CREATE A CULTURE OF HEALTHY EATING, BEGINNING BY TEACHING CHILDREN, TEENS AND YOUNG ADULTS."

- BOB STARK

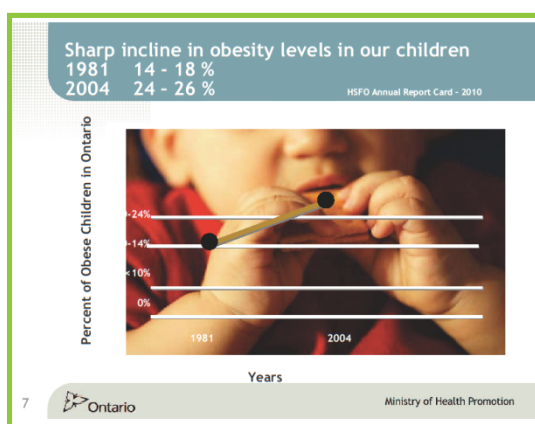


FIGURE 12. The growing childhood obesity problem.

Goal

This session focused on goals and policies aimed at reducing childhood obesity in Canada. It was resolved that Canada's childhood obesity rate can be decreased by 25% within the decade and 50% in twenty years.

The way forward – Reducing childhood obesity rates requires coordinated policy and collective action with governments, industry and NGOs involved. Parents and schools are not exempt from responsibility. A made-in-Canada solution is viewed as the optimal policy path, but Canada must draw on expertise and accomplishments from other jurisdictions. For example, the White House Task Force on Childhood Obesity, spearheaded by Michelle Obama, is to reduce childhood obesity from 20% to 5% by 2030⁶.

Government – All levels of government must be involved. Federal leadership is likely required, but provincial and municipal governments must play a proactive and supportive role. Governments have the ability to use a variety of policy levers including: i) health promotion campaigns targeting parents, ii) fat taxes on junk foods, iii) subsidizing fruit and vegetable programs and iv) enacting food and infrastructure regulation. A combination of progressive and possibly

⁶ "Solving the Problem of Childhood Obesity within a Generation," White House Task Force on Childhood Obesity Report to the President, May 2010.

contentious proposals will be needed to achieve our goal of a 25% reduction in child obesity within the decade and a 50% reduction in 20 years.

Industry – The food industry must continue to develop innovative, healthy food options. This includes creating “shortcut foods,” products which make it easier for busy families to eat nutritionally balanced meals. Further, the food companies should work to develop healthier options for low income groups. Too frequently, low income households face limited food choices due to budget constraints and their environment.

Restaurants – Calorie and nutrition labeling should become the norm not the exception in Canadian restaurants. Either through self-regulation or via government legislation, all Canadian food chains should adopt a nutrition and calorie labeling policy.

Health care – A shift in focus is needed in Canadian health care. Prevention deserves more than lip service. It must be made a priority for the entire health sector. Health care professionals including doctors, nurses, pharmacists and dietitians must promote the links between diet and health as vital to the wellbeing of all Canadians.

Parents – Information programs must target parents. Parents have ultimate control over what their children eat. Evidence from the tobacco reduction experience indicates that population-level programs are more effective than campaigns targeted at high-risk groups. Single parent and low income households have a higher prevalence of obese children. Policy must support these groups and make it easier for them to make healthy food choices.

Conclusion – Canada’s growing childhood obesity problem looms as a health and economic crisis. The current rates of childhood obesity are a major concern to Canadian policy-makers and families alike. It is possible to change however. A national strategy combating childhood obesity can be devised. Canada can reduce its childhood obesity rate by 25% within the decade and by 50% in 20 years.

THE WAY FORWARD: CREATING A CANADIAN FOOD STRATEGY

DR. DAVID SPARLING

Participants identified “creating a national food strategy” as one of the two food and health priorities. This section examines the process needed to turn that priority into a reality.

GUIDING PRINCIPLES

It is important that actors in this process agree on the principles that guide the development of the national food strategy.

- 1.** A national food strategy will have the agriculture and food industry at its core and will address all of the areas where agriculture and food can affect Canadian society from farmers to consumers. The process and strategy must recognize the role that agriculture and food plays in society, including health, the bioeconomy and the environment.
- 2.** A national food strategy is more than an agriculture and food policy framework. It must be holistic and look beyond agri-food policy to include linkages to health policy as well as to NGO and business strategies.
- 3.** The process and strategy should seek to engage all stakeholders who play a significant role in the success of the outcome. The process must actively engage both public and private organizations but in a way that allows for continued progress.
- 4.** Time horizon – the perspective of a national food strategy must be longer than the current five year agri-food policy horizon. However, there are linkages to and implications for government policy frameworks.

THE STRATEGIC PILLARS

Several government and nongovernmental organizations have already been active in creating a vision for Canada. The Growing Forward Policy Framework recognized three key objectives for the current five year policy framework.

- A Competitive and Innovative Sector,
- A Sector that Contributes to Society's Priorities, and
- A Sector that is Proactive in Managing Risk

This is appropriate for an agricultural policy framework designed to support and develop Canada’s agri-food industry. However, with 90% of its resources dedicated to Business Risk Management programs, the Growing Forward Framework is too narrowly focused for a national food strategy. Some of the biggest benefits from such a strategy will be in the areas of health and the environment. Although they form part of the Growing Forward Framework, these dimensions are more restricted than they would be in a national strategy.

In its strategic plan the Canadian Agri-Food Policy Institute (CAPI) identified three strategic priorities - Economic viability and competitiveness, Wellness - Food and health, and Sustainability and the Environment. These are aligned with the three pillars of sustainability – economy, environment and society, although CAPI selected health as its highest priority. Other organizations, like the Canadian Federation of Agriculture and the Liberal Party of Canada have recently announced their intentions to develop a national food strategy and have added areas like local food.

Although the details may differ, there are similarities across the priorities identified by this diverse set of groups. They generally align with the three pillars of sustainability. Economics and competitiveness is a priority for the entire industry and for Canada as a whole. Contributing to society is another important area, and currently health is the most important contribution that the industry can make. The final area is the environment, which includes elements of the green economy.

In addition to groups working on a holistic agri-food strategy, there are numerous organizations working on distinct pieces, such as participants involved in this food and health workshop and in a workshop on agri-food sustainability held two weeks later. One of the first tasks is to engage organizations already involved in the process to work in a coordinated manner toward a national food strategy.

THE PROCESS

The most challenging aspect of developing a national food strategy may be creating a coordinated process. Success depends on strong and focused leadership, creating a process that is inclusive, but not one subject to excessive rules and regulations. Effective strategies should break the process into manageable components without losing the ability to perceive and take advantage of cross-component synergies. I have attempted to describe a process that I believe could result in a useful and executable food strategy for Canada.

1. **Create a steering committee** – The process will not advance unless it is initiated by a group that is viewed as:
 - a. Objective – willing to look beyond the roles of the organizations they represent and work diligently and cooperatively to create a national food strategy
 - b. Representative of the stakeholders
 - c. Authoritative – includes leading thinkers and decision makers, leaders who can speak for their organizations and make commitments to the future of the industry
 - d. Open – to input from a wide range of stakeholders

There is a role for governments in starting the selection process by bringing experts and stakeholders together to agree on a reasonable structure for a steering committee and to suggest members for the committee.

EXAMPLES OF RECENT FOOD STRATEGIES

UK Food 2030 – This strategy contained no vision statement.

The vision built through 6 strategic priorities:

- Encourage consumers
- Profitable & competitive industry
- Sustainable production
- GHG reduction
- Waste reduction
- Increasing research, tech and skills

South Australia's vision and strategy is focused more specifically on consumers, trade and the economics of the industry. Their vision is “South Australian Food – beyond the expectations of consumers around the globe.”

2. **Formulate a project plan** – The first task is to develop a project plan including a proposal for resources needed to achieve a national food strategy. The process requires support. Financial resources are required for travel, translation and publications, administrative support and organizing and hosting of meetings and workshops.
 - a. Intellectual, management and leadership support will be needed to manage the project and to write the various components.
3. **Develop and validate a vision for the future of food in Canada** – The first step is for this group to agree on a vision for Canada’s agri-food industry that defines where the industry is heading. While a vision is important, the wording itself should not be the dominant focus of the committee at the outset.
4. **Identify the major strategic priority areas** - Selecting the priority themes is important since they serve as a focus. The three priorities of competitiveness, health and sustainability, might be a reasonable place to begin discussions.
5. **Select sub-committees for each strategic priority area** - These sub-committees would be selected from a range of stakeholders with expertise in the strategic priority who are committed to helping build a food strategy.
6. **Identify objectives for each strategic priority area** - For each objective the sub-committees should identify strategies to achieve the desired outcomes, a set of performance measures including short- and long-term metrics to gauge success. They should also specify a timeframe and who would be responsible for achieving the objectives. The final result would be a set of tables such as the one below.

OBJECTIVE/OUTCOME	STRATEGIES	PERFORMANCE MEASURES	TIMEFRAME	RESPONSIBILITY

7. **Identify cross-priority synergies and conflicts** - Once the sub-committees have completed their work, a cross-functional committee composed of members of the steering committee and select members of the sub-committees would review the proposed objectives to identify cross-theme synergies or potential conflicts and challenges. Where are the common objectives? This process would also identify the implications for policy and industry strategy and the necessary links to other stakeholders.
8. **Select the strategic objectives to be included in the Canadian Food Strategy** - The cross-functional committee would then select the top strategic objectives and outcomes for a national food strategy, agreeing on the targets, strategies and performance measures.
9. **Launch the Canadian Food Strategy** - The result of this process would be a national food strategy which would then be prepared for national launch.

IMPLEMENTATION

Although creating a Canadian Food Strategy is an essential start, the process will only produce meaningful impacts if the proposed strategies are implemented effectively. Implementation must be a significant part of the planning process. During sub-committee discussions, initial ideas for implementing strategies can be raised in the context of feasibility, responsibility and possible costs. However, the major implementation planning can only occur once the final objectives have been selected.

Canada has the capabilities to produce the healthiest food in the world. We must now direct our significant industry, knowledge and policy resources toward this goal. Rising to this challenge is critical to our future as an industry and a nation.

LIST OF ATTENDEES

Julie Arora

President, Mom's Healthy Secrets

Dr. James Astwood

Executive Director of Scientific Affairs, Martek Biosciences, Inc.

Dr. Keith-Thomas Ayoob

Chair of NuVal Scientific Advisory Board and Associate Professor, Albert Einstein College of Medicine

Kate Barlow

Markets and Trade Officer, Agriculture and Agri-Food Canada

Janet Beauvais

Professor of Practice, McGill World Platform for Health and Economic Convergence, McGill University

Monica Bienefeld

Team Lead, Food Safety, Environmental Health, Ontario Ministry of Health and Long-Term Care

Donna Bottrell

National Director of Nutrition, Compass Group Canada

Dr. Françoise Bouchard

Associate Chief Medical Officer of Health, Ontario Ministry of Health Promotion

Dr. Jim Brandle

CEO, Vineland Innovation Centre

Erin Cheney

Research Associate, Richard Ivey School of Business

Mary Collins

Director, British Columbia Healthy Living Alliance Secretariat

Ted Cowan

Researcher, Ontario Federation of Agriculture

Bette Jean Crews

President, Ontario Federation of Agriculture

Dianne Cunningham

Director, Lawrence National Centre for Policy and Management, Richard Ivey School of Business

Ezio Di Emanuele

Regional Director, Agriculture and Agri-Food Canada

Tom Dowler

Business Development Analyst, Advanced Foods and Materials Network

Laurette Dubé

Professor, McGill University

Jane Dummer

Registered Dietitian

Kim Elmslie

Director General, Centre for Chronic Disease Prevention and Control, Public Health Agency of Canada

Lois Ferguson

Registered Dietitian, Malibu Consulting

Lisa Fortuna

Team Lead, Enteric, Zoonotic and Vector Borne Disease Unit, Ontario Ministry of Health and Long-Term Care

Kevin A. Flanagan

Director, Food Science, McCain Foods Limited

Dr. Alicia C. Garcia

Professor and Chair, Division of Food and Nutritional Sciences, Brescia University College

Bryan Gilvesy

Owner, Y U Ranch

Camille Gooden

Health Policy Adviser, Ontario Ministry of Health Promotion

Melissa Harris

Research and Project Manager, Lawrence National Centre for Policy and Management, Richard Ivey School of Business

Paul Hill

Farmer, Willowgrove Hill Farms

Dr. Hasan Hutchinson

Director General, Office of Nutrition Policy and Promotion, Health Products and Food Branch, Health Canada

Anna Ilnyckyj

Manager, Business Development Policy Unit, Ontario Ministry of Agriculture, Food and Rural Affairs

Nick Jennery

President & CEO, Canadian Council of Grocery Distributors

Dr. John Kelly

Vice President, Erie Innovation and Commercialization

Anne Kennedy

Assistant Director, Food and Regulatory Issues Division, Agriculture and Agri-food Canada

Ken Knox

President, Innovation Institute of Ontario

Mary L'Abbé

Professor and Chair, Department of Nutritional Sciences, Faculty of Medicine, University of Toronto

Pam Laughland

Research Associate, Richard Ivey School of Business

Marc Lazenby

Manager, Policies and Regulatory Affairs, Dairy Farmers of Ontario

Dr. Perry Lidster

Managing Director, Advanced Foods and Materials Network

Phil Malcolmson

Assistant Deputy Minister, Policy Division, Ontario Ministry of Agriculture, Food and Rural Affairs

Michèle Marcotte

Science Director, Food and Health, Lacombe Research Centre, Agriculture and Agri-Food Canada

Dan Mattimoe

Senior Program Manager, Quality and Regulatory Affairs, Campbell Company of Canada

Rory McAlpine

Vice President, Government and Industry Relations, Maple Leaf Foods

Don McCabe

Vice President, Ontario Federation of Agriculture

David McInnes

President and CEO, Canadian Agri-Food Policy Institute

Dr. John Millar

Executive Director, Population Health Surveillance, Provincial Health Services Authority

Cathy Mous

Past Chair, Ontario Agri-Food Education Inc.

Jennifer Munro-Galloway

Senior Policy Analyst, Healthy Schools and Student Well-being, Ministry of Education

Al Mussell

Senior Research Associate, George Morris Centre

Penny Nelligan

Director, Standards, Programs and Community Development Branch, Ontario Ministry of Health Promotion

Robert Orr

President and CEO, Ocean Nutrition Canada Ltd.

Domenica Ozarko

Director, Ontario Ministry of Health Promotion

Martine Pageau

Nutritionist, Food and Nutrition Policies, Ministère de la Santé et des Services sociaux du Québec

Gopinadhan Paliyath

Professor and Research Program Director, Food for Health, University of Guelph

Allan Paulson

Professor of Food Science and Technology, Dalhousie University

Grant Pierce

Executive Director of Research, St. Boniface General Hospital Research Centre

Francy Pillo-Blocka

CEO, Canadian Council of Food and Nutrition

Ron Reaman

Vice President, Federal, Canadian Restaurant and Foodservices Association

James Reffle

Director, Environmental Health & Chronic Disease Prevention, Middlesex-London Health Unit

Dr. Gregor Reid

Director, Canadian Research and Development Centre for Probiotics, Lawson Health Research Institute

Phil Richards

Chairman, Ontario Processing Vegetable Growers

Brandon Schaufele

Post Doctoral Research Associate, Richard Ivey School of Business

Bob Seguin

Executive Director, George Morris Centre

Marsha Sharp

CEO, Dietitians of Canada

Colin Siren

Associate Vice President, Ipsos Forward Research

Colleen Smith

Executive Director, Ontario Agri-Food Education Inc

David Sparling

Chair of Agri-Food Innovation and Regulation, Richard Ivey School of Business

Bob Stark

Deputy Minister, Ontario Ministry of Health Promotion

Gord Surgeoner

President, Ontario Agri-Food Technologies

Phyllis Tanaka

Vice-President, Scientific Regulatory Affairs, Food Policy, Food and Consumer Products of Canada

Jill Tansley

Municipal Policy Specialist, City of London

Carole Thibault

Senior Manager Regulatory Affairs, Danone Inc. Canada

Heather Thomas

Public Health Dietitian, Middlesex-London Health Unit

Wendy Trylinski

Community Program Manager, Nishnawbe Aski Nation

Lori Turik

Executive Director, Ivey Centre for Health Innovation and Leadership

Frank Valeriote

Minister of Parliament, Guelph

Ari Veittiaho

HBA student, Richard Ivey School of Business

Susanne Warren

Senior Policy Analyst, Ontario Ministry of Children and Youth Services

Rodger Wasson

CEO, Tomato Products Wellness Council

Peter Watts

Director of Market Innovation, Pulse Canada

Dr. Rickey Yada

Scientific Director, Advanced Foods and Materials Network

George Zegarac

Deputy Minister, Ontario Ministry of Agriculture, Food and Rural Affairs

ACKNOWLEDGEMENTS

We would like to sincerely thank the many individuals and groups who dedicated their time, expertise and energy to ensuring the workshop's success.

PARTNERS

Advanced Foods and Materials Network
Agriculture and Agri-Food Canada
Canadian Agri-Food Policy Institute
McGill World Forum for Health and Economic Convergence
Ontario Agricultural Adaptation Council
Ontario Federation of Agriculture
Ontario Ministry of Agriculture, Food and Rural Affairs
Ontario Ministry of Health Promotion
Richard Ivey School of Business

STEERING COMMITTEE

Janet Beauvais, McGill University
Dianne Cunningham, Richard Ivey School of Business
Phil Malcolmson, Ontario Ministry of Agriculture, Food and Rural Affairs
Domenica Ozarko, Ontario Ministry of Health Promotion
Rickey Yada, Advanced Food and Materials Network
David McInnes, Canadian Agri-Food Policy Institute
Kate Barlow, Agriculture and Agri-Food Canada
Ted Cowan, Ontario Federation of Agriculture
David Sparling, Richard Ivey School of Business
Melissa Harris, Richard Ivey School of Business
Pam Laughland, Richard Ivey School of Business

LAWRENCE CENTRE STUDENT ADVISORY COMMITTEE

Adebola Adeniran
Jennifer Gautier
Sydney Gosselin
Scott Hayles
Hayley Judge
Jeff Lindquist
William Ross
Chris Scott
Monica Tran