

*Canada's Industry-Led  
Food Safety Programs  
—The Road Ahead*

*Canadian On-Farm Food Safety  
Working Group  
and the  
Canadian Food Inspection Agency*

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## Welcoming Remarks

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Jocelyne Galloway, Canadian Federation of Agriculture

Jocelyne Galloway welcomed participants to the conference, which was jointly organized by the Canadian On-Farm Food Safety Working Group (COFFS WG) and the Canadian Food Inspection Agency (CFIA.) She noted that the conference had attracted 140 registrants from government and the on-farm and post-farm sectors, including participants from Australia, China, and the United States.

## Opening Remarks

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Carla Barry, Acting Director, Consumer Protection Division, Canadian Food Inspection Agency

Carla Barry reviewed the challenges facing food safety managers in government and industry, both in the global and Canadian contexts. She said a key challenge is greater public demand for information about food and health impacts, and for a broader range of safe, convenient, reasonably priced, and high-quality products.

Another challenge is the visibility of food safety issues such as chemical contaminants, anti-microbial resistance in food products, and food-borne illnesses that result in food recalls. Increased knowledge and capability permitting trace levels to be found need to be balanced with reasonable tolerance levels.

Canada accepting these challenges, Barry said. Focusing on consumer confidence and protection, industries are leading the response through innovative products, technologies, and packaging while taking into consideration animal welfare, ethnicity, and ecology. Adopting risk-reduction strategies such as the Hazard Analysis Critical Control Point (HACCP) system and On-Farm Food Safety Recognition Program (OFFSRP) ensures that products on the market are safe. Timely, transparent response is provided by a comprehensive Food Recall and Emergency Response system.

Ever-increasing global trading is also demanding greater international cooperation on food recall and other issues. Barry said that Canada plays an important role in influencing international food safety standards, including demonstrating comprehensive animal and plant health surveillance and dealing with threats through terrorism.

## Master of Ceremonies

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Warren Smandych, National Coordinator, On-Farm Food Safety Program, Canadian Food Inspection Agency

### Panel 1 - Canadian Achievements - On-Farm & Post-Farm Programs

#### On-Farm Food Safety Programs: A Road of Achievements

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Jocelyne Galloway, Program Manager, Canadian Food Safety and Quality Program On-Farm, Canadian Federation of Agriculture

Jocelyne Galloway highlighted the achievements of Canada's On-Farm Food Safety (OFFS) programs, first outlining the history of OFFS in Canada. Consumer demand and market drivers led to various commodity-based initiatives in 1990, she said. In 1997 producers and government established the Canadian OFFS Program and nominated the Canadian Federation of Agriculture (CFA) to administer the program on their behalf in 1997. The On-Farm Food Safety Working Group was formed in 1998. The Canadian Food Safety and Quality Program (CFSQP) were established in 2004.

Today, Galloway said, OFFS programs are industry-led, national, accessible, commodity-specific, HACCP-based and auditable, consistent, modular and expandable, recognized in Canada, and internationally acceptable. They are also affordable for producers, which is essential for program sustainability and consumer buy-in.

Moreover, the programs are technically sound. OFFS uses the rigorous HACCP-based approach that incorporates current science, upstream and downstream input, peer and CFIA expert reviews. OFFS also accommodates information sharing and "producer friendly" practical results.

All stakeholders play important roles in this industry-government partnership, Galloway said. Agriculture and Agri-Food Canada (AAFC) provides projects funding for food safety system development and implementation to help guide industry's efforts. CFIA provides technical expertise and recognition; CFA provides management on behalf of the industry and the link between government and producers. National producer organizations (NPOs) and producers carry out development and implementation, and provide co-funding.

Galloway said that the program principles provide for national systems and standards that ensure parity, transferable results, and consistent cost-sharing and eligibility criteria across jurisdictions.

Program development and implementation comprises five phases, she said: national commodity /industry strategy design, system development, training materials and delivery, government recognition, and implementation on farms.

Galloway said there are currently 29 commodity-specific on-farm programs either in development or being implemented, covering over 99% of primary production in Canada.

Galloway reviewed the COFFS WG, whose membership includes national commodity groups, general farm organizations, and other industry associations, such as those representing feed mills and veterinarians.

The COFFS WG's activities include negotiation of official recognition, (to be completed in 2007) producer risk management, delivery options costing analysis, promotion at farm and food industry events, on-farm feed mixing, and international scan of OFFS programs.

It has completed templates for national program management systems, a risk management planning guide, and a national certification body business plan, Galloway said. Work is ongoing to produce a national auditors' training module, and to undertake website and communications activities.

Galloway said that the challenges lying ahead include:

- completing work on developing OFFS programs
- implementing 200,000 plus farms
- raising awareness
- balancing expectations along the supply chain
- working in partnership
- assuring that food safety remains pre-competitive
- keeping programs sustainable and affordable

Future opportunities include building on the collaborative industry-government partnership, completing CFIA's recognition scheme for national and buyers' recognition, and increasing international recognition.

## **Development and Implementation of a National On-Farm Food Safety Program**

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Steve Leech, National Program Manager, Food Safety, Animal Care and Research, Chicken Farmers of Canada

With a focus on the program developed by Chicken Farmers of Canada (CFC), Steve Leech discussed how an OFFS program is developed and maintained, as well as its movement through the federal, provincial, and territorial government recognition process.

CFC established a Food Safety Committee in 1996. An initial producer program was distributed in 1998, and on-farm audits have been occurring since 2001. CFC has produced an On-Farm Producer Manual and a Management Manual.

Industry drivers include consumer demand for food safety measures and non-tariff trade barriers. Leech also noted the need for one food safety program for all chicken farmers, and a recognized program to allow chicken to remain competitive.

CFC's On-Farm Producer Manual is entitled "Safe, Safer, Safest." Leech said it describes a program that uses an HACCP-based approach in developing good production practices that eliminate or reduce hazards and risks to acceptable levels. There are three categories of hazards

on a farm: bacteriological, such as salmonella and E. coli; chemical, such as antibiotic residues, contamination, and mold; and physical.

A single HACCP generic model was developed for all farms. The program included pilot projects, thorough record keeping, and collaboration between CFC's Food Safety Committee and provincial marketing boards.

Leech identified two critical control points: receiving contaminated feed and treatment with medications. He further explained that identifying feed bins, sampling feed at delivery, and flushing equipment after mixing medicated feed are all good practices.

Managing industry-developed program implementation versus individual farmer implementation presents a challenge. Promoting the program, obtaining buy-in, adapting the generic program to 2,800 individual farms, and overcoming the drain on staff and financial resources are further challenges.

The Management Manual is a policies and procedures document that includes topics such as auditing, certification, confidentiality, and program reviews. The certification process has 13 steps, and Leech said the government recognition standards follow ISO-based criteria. The strong review process, federal, provincial, and territorial involvement, and domestic and international recognition have all established its credibility.

CFC has completed the government's Technical Review Part 1 process for its Generic Model and Producer Manual and Part 2 for its Management Manual. It is now implementing the processes in its Management Manual and proceeding to auditing, which is the next step within the government recognition process. Over 80% of chicken farms have been audited, Leech said, and 100% certification of chicken farms is expected by December 31, 2007. CFC's Board of Directors has voted that the program be made mandatory.

OFFS programs on chicken farms are linked to programs at feed mills and hatcheries and to products and inputs, as well as to processors. Leech said that OFFS programming has a strong future in Canada thanks to the strong involvement of industry and government and its realistic, practical, and sustainable approach. Moving forward there must be continuing promotion and greater analyses of resource demand, and contribution to the public good.

## **HACCP: A Necessity for the Packaging Industry**

Larry Dworkin, Government Relations Director, Packaging Association of Canada

Larry Dworkin said that Canada is leading the world in developing HACCP standards for packaging materials. It receives requests from other countries for its standards for plastic- and paper-based materials, and is now developing standards for metal- and glass-based materials.

"If your product goes in a package, you need to know about our standards for packing materials," he told participants. For example, when putting a label on a package, allergens can migrate to the food through the adhesive. Due diligence is needed. He told packaging industry members that they are not just manufacturers of packing materials, but an integral part of the food industry.

The Packaging Association of Canada (PAC) represents 1,100 members: more than 75% of Canadian organizations in the packaging industry. About 40% of the industry is derived from

exports, Dworkin said, mostly to the US, and about 60% of consumer packaging is sold to the food and pharmaceutical sectors.

Dworkin noted that AAFC and CFIA provided funding and expertise in the PAC Project, a national food safety initiative for packaging materials that have direct or incidental contact with foods. With the motto “Think *Inside* the Box,” the project includes materials that have been manufactured to a recognized voluntary standard based on HACCP principles. The standard has industry-wide usage, covering both domestics and imports, and has recognized Canadian audit and certification capabilities.

PAC will introduce the standard in Canada this fall; Dworkin will be leading a series of 1½-day training seminars across Canada. A 2-day workshop to train trainers is already in place.

HACCP is a priority for PAC because of its focus on PAC’s customer—the food-producing industry. Moreover, it provides a value proposition of helping a business grow and reduce costs.

Dworkin emphasized that HACCP’s principles are scientifically based. He listed several companies that require their packaging suppliers to be HACCP-compliant: Kraft, Nestle, Parmalat, and Natrel.

HACCP-compliance helps a business grow because it improves customer satisfaction, increases exporting opportunities, and allows process standardization across multiple plant locations.

It reduces business costs because the improved manufacturing processes lower waste, the focus on hygiene cuts down on employee absenteeism due to illness, and a business faces less risk of food safety problems and food recalls. If a case does go to court, Dworkin said, having a HACCP program in place will allow a business to demonstrate due diligence. At Parmalat, complaints were reduced by over 30% after the program was implemented.

The PAC Project involved the food industry, packaging suppliers, raw material suppliers, and government. Dworkin said the PAC HACCP Toolkit consists of a prerequisite program along with the HACCP standard itself. Manuals for management and workers are included. At the field trials conducted thus far, he said the standard has received excellent feedback.

## **Federal/Provincial/Territorial On-Farm Food Safety Recognition Program (FPT OFFSRP)**

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Germain Brazeau, Policy Analyst, Food Policy Coordination Division, Canadian Food Inspection Agency

Germain Brazeau told participants that the On-Farm Food Safety Recognition Program (OFFSRP) arose from rising consumer expectations prompted by the 2,000,000 annual cases of food-borne illness in Canada which was costing \$1 billion per year. New threats to food safety were emerging through international food trade, foreign travel, and changes in food consumption habits and food production. International trade was also leading to new requirements and production measures.

Brazeau said that governments and industry are working together to meet shared goals, developing and implementing national food safety systems throughout the agri-food continuum from “field to fork,” and “gate to plate.”

Canada announced the Agriculture Policy Framework (APF) in 2002. The APF has positioned Canadian agriculture for sustained growth and profitability and helped Canada increase its share of international markets. In fact, food safety programs have been in development since the 1990s. Funded by AAFC through the APF's Canadian Food Safety and Food Quality Program, the Canadian approach to food safety is based on the HACCP system and voluntary development by national organizations.

Brazeau said that CFIA leads the government recognition process, with provincial and territorial participation. The goal of recognition is to enhance consumer confidence in Canadian-produced food, reinforce Canada's reputation as a leader in food safety and quality, and expand markets for Canadian products.

The recognition process involves multi-party examination and assessment of four component systems. Review teams include federal, provincial, and territorial specialists from various fields. CFIA issues a letter of recognition upon a successful implementation assessment, he said, and ongoing monitoring is conducted post-recognition.

The specialists examine a farm's food safety measures for technical soundness, adherence to HACCP principles, and compliance with federal, provincial, and territorial regulatory requirements, Brazeau said. They also ensure management and delivery are effectively documented, maintained, and improved.

Brazeau said the recognition process has three stages: a CFIA-led Technical Review (Part 1- Generic HACCP model and producer manual) conducted with provincial and territorial participation; a CFIA Technical Review (Part 2 – Management system documentation); an Implementation and Third-Party Audit, led by national producer organizations; and an Implementation Assessment, again CFIA-led with provincial and territorial participation.

Post-recognition monitoring includes ongoing and "triggered" assessments to ensure the food safety system is effectively managed and continues to be technically sound.

Brazeau presented a progress report for the OFFSRP, listing ten national organizations that have completed Technical Review Part 1 since June 2002. Of these, three have completed Part 2. An additional four national organizations are undergoing Technical Review Part 1. The federal, provincial, and territorial governments plan to complete the policies and protocols for the OFFSRP by October 2007. CFIA will use this document to develop a procedure manual by March 2008.

CFIA is also exploring post-farm recognition and conducting a needs assessment to determine industry readiness, Brazeau said. If it is ready, CFIA will develop a post-farm food safety recognition program similar to the on-farm program.

### **Panel Discussion**

A participant asked about the role of ongoing research to analyze real data and implement changes to the food safety program.

Leech acknowledged that a continual improvement process is needed, especially since new hazards, and new ways to reduce hazards, can arise. PAC has a working committee that meets annually to review standards and determine whether they need to be changed, Dworkin said; Brazeau said the COFFS WG has a committee that explores strategies on how and where to do research. The key is coordination and information sharing, which he said are huge tasks.

The US National Academy of Sciences has pointed to the need for a research clearinghouse, the participant said. She asked which Canadian department could be charged with handling such an initiative.

Currently there is fragmentation, Brazeau said, but a willingness to move toward having a core group oversee research. However, he said, he is uncertain which department should take the lead.

A participant asked why Canada allows imports that do not meet the same safety standards Canadian producers must meet.

This is a concern from all sectors, Leech replied. The COFFS WG is currently studying international standards. However, moving forward toward a level playing field requires Canada to have standards in place. Dworkin expressed hope that large organizations such as supermarkets will demand greater government inspection and imports that meet standards. The pressure needs to be driven from the top down.

A participant said that training is critical to success. Leech agreed, noting that the first step in program implementation is to train the producers. Moreover, education must be ongoing to keep up with new science and program changes. Brazeau said national organizations have a responsibility to develop training materials and provide training to people at every level within producer organizations.

Barry said CFIA is working with foreign trading partners to conduct baseline surveillance of incidents, understand existing hazards, and ensure trading partners know Canada's requirements. There is also a partnership between CFIA and industry, she said, with CFIA assisting industry to understand the standards and compliance requirements so that industry can ensure imports into Canada meet the high standards of food safety Canada has established.

Brazeau said there are currently no guarantees to ensure food products, containers, and related machinery are all free of contamination. The use and practice of the HACCP systems being used now and in the long term can and will improve the situation. What the HACCP systems can provide now, Leech said, is a method to limit the risk of contamination and offer measures of protection.

A participant said that the bottom-line costs associated with putting food safety systems in place may require some producers to get financial help to reach the next phases. Galloway echoed the concern about achieving a level playing field regarding imports into Canada. She said CFA and CFIA have tried to explore ways to ensure that imports meet the same standards that Canadian products must meet. The challenge is that it can become a trade barrier if stipulated this way in regulations, she said. Commodity organizations that are sensitive to imports and dependent on trade oppose it. There are mixed feelings in the industry, although a real need exists to bring about a level playing field.

## Panel 2—The International Approach to Food Safety and Quality Programs

### Australian Red Meat Industry Food Safety Programs

Duncan Bruce-Smith, Coordinator, Livestock Quality Systems, Meat and Livestock Australia

Mr. Bruce-Smith said that in Australia, “primary food production” means the growing, picking, harvesting, collection, or catching of food. Primary food production includes the transport or delivery of food; the production, treatment—for example, washing—or storage of food; and any other regulated food-producing activity.

Livestock traceability is at the heart of food safety and quality in the Australian red meat industry. It has a long history, beginning with the establishment of the state-based Property Identification Code (PIC) database in the 1960s and 1970s. Since 2000, food safety and traceability have become paramount, with the implementation of the National Livestock Identification System (NLIS) beginning in 2003, the implementation of the Livestock Production Assurance (LPA) program in 2004, and the incorporation of Cattlecare and Flockcare into the LPA on-farm Quality Assurance Standard (LPA QA) in 2006. Since 1997, the NLIS for cattle has used radio frequency whole-of-life tags to record all movements, from birth to abattoir, in a database. The system is mandatory. 35 million tags are currently in use, 166,000 properties are using approved NLIS devices, and 4000 transactions are entered into the database every day.

The Australian livestock industry is very proactive on quality assurance. Using HACCP principles, it established Cattlecare and Flockcare to identify key production practices and prevent contamination from on-farm practices further down the supply chain. Both programs are voluntary and independently audited.

LPA manages the on-farm food safety and quality assurance standards of the livestock industry. Bruce-Smith said its main elements are:

- property risk assessments
- safe and responsible animal treatments
- stock foods, fodder crops, grain, and pasture treatments
- preparation for the dispatch of livestock
- livestock transactions and movements

By becoming fully certified with LPA, producers agree to be included in a random audit pool. Two thousand producers are randomly selected from the pool for an audit each year. The audit involves an onsite visit to review a producer’s LPA record keeping systems and provide an assessment of how it is meeting the five main elements of LPA. As part of the process, the auditor and producer agree on necessary activities to correct a problem or problems within an agreed time period. Where the auditor finds a critical non-conformance—that is, a definite risk to food safety—the non-conformance is documented. Bruce-Smith said the LPA is complemented by National Sleyard Quality Assurance program, Truckcare, and the National Feedlot Accreditation Scheme.

All Australian export-meat processing plants operate under the Export Control Act. Meat exports fall under the Meat Safety Quality Assurance program, and the Australian Quarantine and Inspection Service (AQIS) plays an important role in the program. Bruce-Smith said that AQIS is responsible for:

- registering export abattoirs, boning rooms, meat-processing establishments, and cold stores
- licensing exporters
- providing meat inspection services—AQIS staff is on-plant at every exporter
- issuing export permits, health certificates, and Halal certificates

Bruce-Smith said that the Australian agriculture and agri-food industry, like Canada's, is dependent on market access. As a result, both industry and the federal and state governments are committed to food safety and quality assurance programs that provide confidence to all markets, both domestic and international. The agriculture and agri-food industry's commitment to integrity, food safety, and quality assurance are essential to market confidence in Australian agricultural products. Its key programs focus on the ability to trace animals and meat via quality systems that operate throughout the length of the supply chain.

## **California Leafy Greens Marketing Agreement and Marketing Order**

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Henry L. (Hank) Giclas, Vice President Strategic Planning, Science and Technology, Western Growers Association

Henry Giclas said that, since early 2004, the US Food and Drug Administration (FDA) and the California Department of Health Services (DHS) have considered lettuce and other leafy greens as "commodities of concern." On September 14, 2006, the FDA announced an E. coli outbreak on spinach; two further E. coli outbreaks on spinach took place in November and December 2006. The 2006 outbreaks and the attention they received in the media exacerbated an ongoing issue with food quality, and further eroded market confidence in spinach and other leafy green produce.

It has been estimated that growers and shippers lost more than \$100 million as a result of the spinach outbreaks. Moreover, policy makers held numerous hearings on the September outbreak that strongly criticized both the leafy greens industry and regulatory agencies. As a result of that criticism, the Board of Directors of the Western Growers Association (WGA)—a trade association of growers of fresh produce in California and Arizona—directed WGA staff to develop baseline best practices for the production and harvesting of lettuce and other leafy greens. It also requested them to develop and implement a system for ensuring that the best practices are being consistently and universally employed within the leafy greens industry.

Giclas said that an important consequence of the E. coli outbreak on spinach and the ensuing "crisis of confidence" was the implementation, in January 2007, of the California Leafy Greens Marketing Agreement (MA), which enforces mandatory food supply standards audited by government inspectors. Standardized practices, governmental oversight, public and market assurance, collective activity by growers and handlers, and flexibility are all goals of the MA. Its key elements are baseline requirements, mandatory compliance, verification and documentation,

and recognition in the marketplace. Central to the MA are the food safety standards, also referred to as “metrics”, that represent the best practices available today to prevent food-borne illnesses.

The first step in the process of developing the metrics was to identify the key risk areas for the production and harvesting of lettuce and leafy greens. These include water quality, soil amendments, adjacent land use, animal activity, and worker sanitation and hygiene. A three-tiered approach was used to identify the following metrics:

- a comprehensive literature review
- a review of standards or metrics developed by authoritative or regulatory bodies
- the expertise of food safety professionals in the private sector, universities, and government

Accessibility and outreach are vital to the successful development of the metrics. Currently, the leafy greens industry is seeking comment on the proposed metrics from buyers, growers, processors, consumer advocates, environmental organizations, resources agencies, academics, and regulatory agencies.

In the future, Giclas said, the WGA would build on the success of the MA to secure the enactment of a state marketing order, which would require a referendum, and, eventually, a federal regulatory framework for lettuce and other leafy greens.

## **International Food Safety Program Comparison Project**

Paul LeBlanc, Chairman, On-Farm Food Safety Committee, Canadian Horticultural Council

Heather Holland, Senior Technical Manager, Food Safety and Government Relations, Canadian Produce Marketing Association

Paul LeBlanc said that food safety issues are important to market access, both domestically and internationally. Food safety programs are costly, and participation in the programs is often voluntary. Canadian producers want a level playing field and are especially concerned about imported products sold by their competitors. Accordingly, the Canadian Horticultural Council (CHC), the Canadian Produce Marketing Association (CPMA), and the Canadian Council of Grocery Distributors (CCGD) have agreed to recognize each other’s national food safety programs and to establish equivalency criteria and programs with food exporting countries. It is a priority for the three associations to demonstrate to consumers their dedication to food safety throughout the produce supply chain. The movement towards a strengthened and harmonized approach to food safety within the fresh produce industry is being realized and moved forward through several converging initiatives.

LeBlanc said that one of those initiatives, in which the Canadian Federation of Independent Grocers (CFIG) is also participating, is the Food Safety Comparison Project. The purpose of the Project is “to establish equivalencies between key food safety programs, so that buyers and importers can confidently purchase both domestic and imported fresh produce at all levels of the supply chain that have been produced through a program that promotes food safety.” Its goals are:

- an environmental scan of fresh produce food safety programs for the on-farm, repacking, wholesale, and minimally processed sectors

- the development of comparison criteria covering program components, audit practices, training, reporting, and governmental recognition
- a comparison of CHC and CPMA food safety programs with other programs to establish commonalities and differences
- a final report that outlines the comparison of programs and makes recommendations as appropriate

Heather Holland reviewed the contents of the final report, focusing on the comparison criteria, the comparison output, the programs that have been identified for comparison, and the countries to be reviewed. There will be three levels of comparison criteria: general characteristics, such as commodity scope and content scope; program content and food safety, such as HACCP or HACCP-based programs and the availability of documents; and conformity assessment factors, such as certification body requirements and audit attributes. Three types of programs will constitute the comparison output. Described programs will be summarized briefly in the final report, while benchmarked programs will receive a short description. Compared programs—programs that have detailed requirements—will be fully described. The report will contain tables on the key criteria of major programs, and the tables will use a system of “visual scoring.” Holland said the programs and countries identified for comparison are:

- Canada: the CHC potato and greenhouse programs
- US: the California Leafy Greens Marketing Agreement and the United Fresh Melon program
- Outside North America: the New Zealand Good Agricultural Practice and U.K. Produce Assured programs

Holland said the Food Safety Comparison Project would result in the establishment of an equivalency-setting process to ensure harmonization and co-ordination of currently competing food safety programs in the fresh produce sector. She noted that having equivalent food safety programs that are recognized and subscribed to by the entire food supply chain “will ultimately reinforce practices that contribute to the production, processing, transportation, selling and cooking of safe food within Canada.”

### **Panel Discussion**

Several participants asked about the financing and frequency of audits.

Bruce-Smith said that, in the instance of cattle, the audit process is subsidized by a per-head levy and through the sale of reporting forms. In the instance of grains, there is no subsidy and audits are paid for by the growers out of their own pockets. In the instance of the California Leafy Greens Marketing Agreement, Giclas replied that the operations of the Agreement are currently financed by an assessment of \$0.02 per box, though that amount is now being reviewed.

A participant asked how Australia and the United States deal or should deal with imported products.

Bruce-Smith said that all food exporting countries should have similar food safety and quality assurance systems; otherwise, food safety and quality assurance would become competitive issues. Giclas said he thought that imported products could be dealt with in two ways—either by random inspections or by prohibiting the importation of products that do not meet domestic criteria.

A participant, noting the tremendous rise in the volume of farm-gate sales, asked how farm-gate producers could be brought within the scope of food safety and quality assurance systems.

Leblanc said that, since farm-gate sales are largely customer driven, farm-gate producers are naturally concerned about food safety and quality. At the same time, it is unclear how producers could be brought within the scope of food safety and quality assurance systems. Holland said there is a need for greater outreach to demonstrate to producers the importance of participating in food safety and quality assurance systems.

A participant asked about the lessons learned especially by producers and about sustaining food safety programs.

Giclas said that one important lesson is that new initiatives are costly. A move towards universal or common standards would reduce costs, and retailers and commodity groups should be encouraged to pay more for food safety. Bruce-Smith said that, in Australia, producers are acutely aware of the costs of the programs but are unclear about the benefits. He has found, however, that producers get a better idea of the benefits when they are asked to consider the costs of their being excluded from markets outside Australia. LeBlanc said that producers now face narrow margins and increasing competition and that, as a consequence, the production base is changing because of costly and onerous programs. Industry is responding to its customers, but government has a role to play if the programs are to continue.

## **Luncheon Keynote Address: Agriculture, It's Not Just a Commodity**

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Larry McIntosh, President and CEO, Peak of the Market

Larry McIntosh described the Peak of the Market organization and how it successfully branded its commodity of vegetables to create phenomenal consumer awareness and demand.

Peak of the Market is a 65-year-old company in Manitoba. McIntosh said it represents 50 vegetable growers who grow more than 125 varieties year-round under its brand name. Employing over 1,000 Manitobans, its Board of Directors is elected by the growers.

McIntosh said that food service and customer service are key priorities of the company's strategic plan. The company stays in touch with consumers, wholesalers, and distributors and looks constantly for new varieties of vegetables to grow. It provides a toll-free information hotline. To turn complaints into positive experiences, every refund is accompanied by a letter of apology. The company tells customers upfront in cases where there may be problems with supply or quality.

Good customer relations help sales while accelerating payment and reducing bad debt. McIntosh said the company averages 23 days to receive payment after invoicing, and a bad debt of 0.5% of sales. The industry averages are 53 days and 1.8%.

Food safety is also key. Peak of the Market has never had any food safety issues with its products. Practising due diligence, the company has a food safety program head and has implemented the On-farm Food Safety program.

Another strategy is marketing and innovative branding. McIntosh emphasized giving simple, home-grown, and down-to-earth messages that try to be different and fun.

McIntosh said that charity and “giving back to the community” are fundamental. On the company’s website, users can sign up to receive a free recipe every day by email. In February the company offered to donate 50 pounds of vegetables to the Winnipeg Food Bank for every new subscriber. About 9,700 people subscribed. Another campaign included a picture of a missing child on every recipe, in support of Child Find Canada. The company also sells recipe CDs for \$12. For every CD sold, \$6 goes to the Canadian or American Cancer Society. Non-profit groups receive \$6 for each CD they sell.

McIntosh said he joined the company 13 years ago. Since then, sales have more than doubled, and in the last two years reached \$50 million. A March 2007 survey showed that Peak of the Market comes to mind for 71% of Manitobans when they think of a brand name for fresh vegetables. It is also among the top five companies people associate with giving back to the community. “Charity comes back to marketing,” McIntosh said.

McIntosh described the company’s philosophy: charity, community, passion for its work, pride, ethics, honesty, responsibility, professionalism, willingness to change, betterment of all, and a win-win situation with everyone working together.

Asked about Foodland Ontario, a provincial program to promote Ontario produce, McIntosh said although it differs from Peak of the Market because it is more generic and not attached to a brand name, “anytime you can promote buying local, it’s positive.”

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## **Master of Ceremonies**

Connie Kehler, Executive Director, Canadian Herb, Spice and Natural Health Products Coalition.

## **Panel 3—Emerging Challenges in Food Safety**

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### **Nutrition and Health—New Challenges and Opportunities for the Agri-Food Industry**

Dr. Mary R. L’Abbé, Director, Bureau of Nutritional Sciences, Food Directorate, Health Canada

Dr. Mary L’Abbé noted that her presentation had a different aim from those of the other speakers: to focus on food as it contributes to health.

The negative health messages about food common in the 1970s and 1980s have been replaced by messages about “healthy foods” over the past 10 to 15 years. L’Abbé reviewed the claims that can be made about a food on packaging materials—nutritional, nutrient content, nutrient function or biological role, and general health such as generic or “disease risk reduction” claims.

L’Abbé reported that, in May 2004, the World Health Assembly (WHA) had recommended reducing the levels of saturates and trans fats, free sugars, and salt in food products, as well as increasing the consumption of fruits and vegetables, legumes, whole grains, and nuts. A

successful motion in the Canadian House of Commons towards the end of November 2004 called upon the government “to enact regulation, or if necessary present legislation, that effectively eliminates processed trans fats, by limiting the processed trans fat content of any food product sold in Canada to the lowest level possible.” In June 2006, the federal Trans Fat Task Force recommended that the amount of trans fats in food products be limited through regulation and provided information on healthier alternatives for each sector of the food industry. There is, however, continuing media interest in trans fats. Levels of trans fats in some Canadian fast foods remain at alarming levels and, despite labelling, “trans fats holdouts” remain in supermarkets. Canola oil could be a replacement for trans fats; it is growing in popularity and demand for it continues to rise.

Citing a study published by Statistics Canada during April 2007, L’Abbé said that salt represents the next challenge for those concerned about “healthy foods.” According to the study, the average daily intake of salt (sodium) is, regardless of age, far beyond the upper limit recommended by the WHA in 2004. The study also found that, in 2004, the average intake for all Canadians was 3,092 mg of salt a day, one-third more than the recommended maximum. Even young children were found to consume too much salt.

## **Emerging Food Issues—The Consumer Perspective**

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Dr. Mary Alton Mackey, President, Alton Mackey Associates

Mary Alton Mackey said that a number of changes have increased the risks to consumers from food-borne diseases:

- changes in diet
- lower levels of food-preparation skills than in the past
- new methods of producing and distributing food products
- new or re-emerging infectious food-borne agents
- the increasing use of commercial food services
- new ingredients
- the use of “moist foods”
- the growing number of people, mainly the young and the elderly, who are potentially at risk from severe or fatal food-borne diseases

Alton Mackey said that, while consumers applaud the concern of the food industry with improving its safety practices, they do have two complaints—process and voluntary participation. Standards, guidelines, and regulations initiated by the Government of Canada are put forward for notice and comment so that the general public has an opportunity to give input. This process results in input from a wide range of sources and experts. At the same time, she said, it is very difficult to find information from or about the Canadian Food Safety and Quality Program within Agriculture and Agri-Food Canada, and the department’s food advisory group no longer exists. There is a lack of transparency in the development of industry-driven best practices and guidelines. Practices and standards are created behind closed doors; no mechanism exists for the public to comment on the practices and standards before they have been adopted. Voluntary participation in the development and implementation of best practices and standards

does not, therefore, provide assurance to consumers that food products reaching the marketplace are as safe as possible. For food safety standards to be credible to consumers, she said, the standards must be mandatory, government approved, based on commodity-specific needs, applied consistently across producers within the same commodity group, and subject to oversight by the Government of Canada. The same criteria should also be applied to imported food products.

Alton Mackey said that Canadian consumers want to know the food they eat is safe and nutritious. The establishment of an agency in Canada with the same mandate as the Center for Food Safety and Applied Nutrition in the United States, which combines responsibility for food safety and applied human nutrition, would be helpful. Consumers must be able to be effective risk managers at the point of purchase and in their own homes. Consumer education is essential. Point-of-purchase information must be clearly displayed for foods that, if temperature abused, can pose a hazard to consumers. Labels must contain easy to find and easy to read information about food storage in a designated place on the label. Consumers should be provided with consume-by dates and “once opened use in so many days” dates for all foods that are potentially hazardous.

Countries within the European Union have already established these requirements; the United States currently has guidelines for labelling information about storage conditions and is now exploring guidelines for the implementation of consume-by dates and of use-in-a-specific-timeframe-once-opened dates. Today, Canada has no guidance, except that food storage information other than room temperature must be provided on the label.

## **China's Food Safety in the Midst of Globalization**

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Dr. Wenran Jiang, Acting Director, China Institute, University of Alberta

Wenran Jiang said that, while much of the attention directed at food safety issues has been in countries with advanced economies, food safety issues also exist in emerging countries. For example, a recent flood of reports indicate that some Chinese exports are unsafe, contaminated, and environmentally unfriendly, especially in the food and pharmaceuticals sectors.

Jiang said his presentation would focus on China's modernization in an age of globalization, and the externalization of China's product safety challenges.

Jiang said that China's modernization process over the past 30 years has resulted in unprecedented economic growth, especially in exports. The growth of the Chinese economy is heavily dependent on foreign trade. The country's modernization process has led to high mobility, with some 150 million people on the move from rural areas to urban ones in search of jobs and new economic opportunities. Reforms have weakened the ability of the central government to effectively control or monitor an explosive economy, which is now driven primarily by hundreds of thousands of private enterprises. Cutthroat capitalism and pure greed for profits, 19<sup>th</sup>-century style, are raging in the world's fourth largest economy. Longer working hours, lower wages, higher education costs, a collapsing health care system, and the destruction of the environment represent “the dark side of modernization,” he said. Moreover, some enterprises have ignored the rules and have engaged in using fake substitutes and cheating “simply to make a buck.”

Jiang said that, despite recent international complaints about the safety of Chinese exports, the Chinese people themselves, not foreigners, are the principal victims of many of the tragic food and drug scandals. Fake food and drugs are often to be found in the marketplace and are even being sold to hospitals.

Jiang acknowledged that the externalization of China's product safety challenges affects not only China, but also Canada and the rest of the world, but said that there is no reason for Sino-phobia. Chinese officials used to treat international complaints about the safety of Chinese exports as isolated incidents or, in some instances, tried to avoid responsibility altogether. However, Chinese leaders now understand that the country stands to lose billions of dollars in trade if it does not take steps to restore worldwide consumer confidence.

Jiang said that there are indications that China is taking product safety issues, both domestic and international, very seriously.

China has acknowledged some of the problems reported in the domestic and international media and has promised to investigate and resolve them.

As well, the Chinese leadership has launched a nationwide crackdown campaign. A Beijing court recently sentenced the former head of the nation's food and drug safety regulatory administration to death for accepting bribes to certify the manufacturers of fake drugs. Several investigations in response to reports of fake food and pharmaceutical products are also underway.

The Chinese government announced early in June 2007 a new set of regulations aimed at enhancing China's food and drug safety system. Based on measures first revealed in April 2007, the State Council—China's equivalent to Canada's federal cabinet—stressed that a new national monitoring system expected to be in place by 2010 will be able to trace products, deal with accidents, and handle food recalls.

Jiang said that, for Canada and other countries, these actions are encouraging steps. He cautioned, however, that no one should take the safety measures of other countries for granted. Canada should consider both adding further resources to and exercising greater care in its overall food and drug inspection capabilities. These initiatives should include not only more vigorous border checking and import control, but also sharing Canada's expertise in the food and drug safety field with China. This will allow China to embrace the rule of law and accelerate the process of establishing a robust monitoring system that will benefit both Chinese and people around the world.

## **Panel Discussion**

A participant asked Alton Mackey what measures farm-gate producers should take to successfully distribute their products to consumers.

Alton Mackey said that Canadian consumers are increasingly interested in buying domestic food products, typically from upscale outlets, where prices are usually not very different from those at large retail grocers. Problems with food safety have their greatest and most direct impact on producers, but all the links in the supply chain have a responsibility to inform consumers about what is happening during a "food emergency." How to buy, store and prepare food products safely are central concerns of consumers. Unfortunately, she said, information about these subjects is either not easily available in one place or not available at all. Neither Agriculture and Agri-Food Canada nor the food industry is particularly transparent, she said. There is no

mechanism for the public to participate in the development of standards, guidelines and regulations.

A participant noted that China is Canada's largest competitor internationally in agricultural products and asked how, if the United States cannot influence China on issues such as the Yuan/US dollar exchange rate, Canada could hope to influence China on product safety issues.

Jiang said that, while the federal government does not have the leverage to influence China on political issues, it could potentially influence China on food safety issues. Such influence could work to Canada's advantage, and Canada does have specific expertise to offer. Canada could also do more testing of imported food products. Communication is critical when dealing with the Chinese, he said.

Alton Mackey said that member countries of the European Union frequently do onsite inspections in food exporting countries, while Canada no longer does so. Transshipments are also a problem, especially when additives have been added in re-exporting countries. Food emergencies affect the whole supply chain, both domestically and in the country of origin.

A participant said that Canada does indeed carry out onsite checks and audits in food exporting countries, sometimes as issues arise, and definitely when there has been some type of outbreak.

A participant noted that some vitamins and minerals can be harmful if they are taken in large quantities and then asked about the situation with respect to supplements and labelling.

L'Abbé said that Canada's labelling regulations for supplements have been harmonized with those in the United States. The regulations stipulate how much of a vitamin or mineral an individual needs and an upper or appropriate level of a particular nutrient. She admitted, however, that this information might not always be immediately visible to the consumer.

## **Keynote Address**

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Anita Stanger, Director, Food Safety and Quality Programs Division, Agriculture and Agri-Food Canada

Anita Stanger said that the Canadian approach to food safety is a collaborative approach among producers, industry, and governments to develop and implement their vision. It requires working together along the entire food chain to protect human health, increase consumer confidence, and increase sector capacity to meet or exceed what the market is demanding while providing value-added opportunities. A field-to-fork approach demonstrates to consumers at home and abroad that Canadian food products on the market are safe and wholesome.

The COFFS WG is part of this success story, she said. It is reaching out to encourage post-farm participation as well. CFIA, along with provincial and territorial partners, have played a key role in the recognition of industries' HACCP-based programs. HACCP is internationally recognized and uses a proactive system to address food safety and quality issues. It also allows incorporation of other practices of interest to consumers, such as biosecurity and traceability.

Stanger noted that the current Agricultural Policy Framework (APF) will expire in March 2008. Industry has expressed concerns about transitional funding and funding continuity. The ministers are meeting this week to set the vision, principles, and high-level policy directions for next

generation programs, although program details may not be developed until this fall. Stanger said industry's views continue to be important. She recommended watching the website [http://www.agr.gc.ca/pol/grow-croiss/index\\_e.php](http://www.agr.gc.ca/pol/grow-croiss/index_e.php) for updates.

Stanger said the APF provided the mechanism to implement a stepwise, integrated approach throughout the entire food chain. Specifically, the Canadian Food Safety and Quality Program (CFSQP) have delivered 3 components: systems development, on-farm implementation, and food safety initiative.

In terms of systems development, 16 national commodity organizations are developing on-farm systems, 13 post-farm organizations are developing post-farm systems, 12 organizations have received funds for traceability systems, and ten commodity organizations have completed Part 1 of the recognition process. Of these ten, Stanger said that three have completed Part 2.

The on-farm implementation component supports producers as they implement national systems. Six agreements have been signed, with a commitment to date of over \$17.5 million.

Stanger said that under the food safety initiative component, two provinces are conducting research on traceability and surveillance, six are enhancing their food safety infrastructure, three are assisting non-federally registered processing plants, and over the last year 640 applications were approved.

Canada has learned the importance of effective, consistent communication and consultations with industry, Stanger said. Government and industry must collaborate to shorten the timeframe to develop and implement food safety systems. Program flexibility is needed to allow multiple system development and address emerging issues. Greater collaboration among on-farm and post-farm groups and between the CFSQP and other programs is needed.

The future calls for implementation throughout the food chain, along with measured use of government programs, tracking the adoption of food safety systems and their impact on the industry, learning from other countries, and communication between producers, industry, and consumers.

## **Panel 4 – Partnerships: On-Farm and Along the Supply Chain**

### **Update to Canadian On-Farm Food Safety Working Group Conference**

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Craig Bellamy, Office of Animal Biosecurity, Canadian Food Inspection Agency

Craig Bellamy spoke in place of Dr. Keith Campbell, who was unable to attend. His presentation provided an overview of the National Avian Biosecurity Strategy (NABS), its objectives and expected outcomes, and the future directions of the OAB.

Prompted by the avian influenza outbreak, the OAB was created in early 2006 to establish a national biosecurity approach. Bellamy said a Canadian working definition for biosecurity is “a system (program) for the analysis of the risks associated with organisms, the management of the risks, and the mitigation of the impacts associated with those risks at the level of the farm, region, or nation, within an industry or other defined compartment.”

Biosecurity occurs even at the level of the barn or pen; it must be integrated across the continuum of the food supply chain, and be national and regional in scope.

Currently, Canada has three evaluations of biosecurity in existing programs—under the Canadian Animal Health Coalition, Ontario Livestock and Poultry Council, and OAB. The evaluations identified inconsistencies—in biosecurity elements within existing programs, in biosecurity measures implementation within examined sectors, and in compliance and enforcement. They also revealed the need for differentiated approaches at times of higher risk levels.

The OAB's mandate, Bellamy said, is to “provide national leadership to develop and implement biosecurity strategies, processes, and tools at borders and within Canada to effectively and efficiently minimize [or] prevent the entry or spread of risks within Canada.”

The OAB drafted the NABS with much input from both industry and provincial and territorial partners in June 2006. Bellamy said the strategy will enable improved coordination between the federal and provincial governments and industry in all aspects of biosecurity, education, research, and disease control. It will also facilitate uniformity in the application of biosecurity programs across Canada.

The expected outcomes for NABS are leadership, a national program, national standards, an advisory council, governance, legislative review, science, financial support, and communications.

The legislative review found that the provincial acts and regulations regarding marketing agencies may be possible vehicle for the governance of biosecurity across Canada. However, Bellamy said, it also showed that consistency across provinces is lacking and may be difficult to achieve.

Bellamy discussed OAB initiatives, including a \$2.9 million fund allocated to AAFC for On-Farm Biosecurity Initiatives Pilot Projects in three provinces, with efforts to identify funding to expand to other provinces. An Avian Biosecurity Technology Development Fund has been established, and seven projects were funded last year out of 21 applications received. The OAB is also carrying out national and international networking, and creating communications tools such as brochures, posters, and awareness kits.

Future directions include collaborating with the COFFS WG to integrate biosecurity into on-farm programs and expanding from the poultry focus to other commodities.

## **Food Safety: The Retail Perspective**

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Jackie Crichton, Director, Food Safety and Environmental Affairs, Canadian Council of Grocery Distributors

Jackie Crichton sent regrets, and this presentation was not made.

## Quality Assurance in the Pork Sector: From Gate to Plate

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Tracey Bryksa, Manager, Public Affairs and Marketing, Manitoba Pork Council

Tracey Bryksa spoke on the food safety and quality assurance program developed by the Canadian pork industry. Her organization, the Manitoba Pork Council (MPC), is a mandatory association for all hog farmers in the province. MPC represents 1,400 hog producers in Manitoba, Canada's largest pig-producing and pig-exporting province. Partners in the value chain include members of industry, veterinarians, producers, truckers, packers and processors, marketers, and consumers.

Food safety is a critical issue, and the public is now more interested in it than ever before. Every stage in the produce-to-consumer chain must be controlled and monitored.

The Canadian Pork Council (CPC) established a technical team of industry and government experts to develop an on-farm food safety program in 1995 and launched the comprehensive Canadian Quality Assurance (CQA) program for Canadian hog producers in 1998. MPC is among the provincial delivery agents.

CQA is not a mandatory program. However, more and more producers are participating. Based on HACCP principles, CQA identifies key food safety issues, describes control measures, and requires producers to follow good production practices and keep detailed records of the hog production process. CQA includes annual third-party validation by certified provincial validators. Over 7,000—90%—of Canadian hog farms are currently validated.

For hog producers, CQA means a competitive edge in both domestic and foreign markets. For processors, it is a guarantee that animals have been produced under stringent standards. All major federally inspected packers and some provincially inspected packers require CQA as condition of sale.

The US-developed Trucker Quality Assurance Program (TQA) is another food safety program specifically for transporters of live pigs. The industry loses millions of dollars annually because of poor-quality pork products resulting from mishandling and bruising during transport. TQA educates truckers on the proper transporting of pigs, with special attention to biosecurity and animal welfare. It is now a requirement for all truckers delivering to US packing plants.

Over 50% of Canada's hog production is exported, and foreign consumers are bringing in increasingly tougher standards for all food commodities, including pork. Canada's federally inspected pork slaughter and processing plants are all HACCP approved.

Market research shows that although Canadians overall are confident in the safety of the food supply, animal diseases such as avian influenza and mad cow disease present a significant concern. The CPC has developed a national Swine Traceability System for quick elimination of disease during a crisis. Its functions include premises and farms identification, animal identification, and animal movement tracking.

Industry has put a priority on promoting food safety to consumers, on the farm and at home. Consumer education on proper food handling and preparation is a key area of focus for the MPC.

## **Partnerships: On-farm and Along the Supply Chain**

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Dennis Stephens, Secretary/Consultant, Canada Grains Council

Dennis Stephens spoke on the HACCP-based on-farm and post-farm food safety modules developed by the Canada Grains Council (CGC), a body that provides an industry forum to examine policy options for Canada's grain industry.

Stephens noted that Canada's grain industry has not yet seen a strong market pull for food safety. One reason is that Canadian grain already has an enviable reputation for being safe, since it has been heavily regulated over many years. Another reason is that most Canadian grain is handled and transported in large quantities, with products of like quality combined together so that the identity of each producer's grain typically is lost.

In 2001, CGC formed an On-Farm Food Safety Management Committee which recommended developing an on-farm HACCP-based food safety system for Canadian grains, oilseeds, pulses, and special crop farms. Seeing no sense in implementing a farm program unless product integrity could be maintained throughout the process, from handling to transportation to buyer and point of export, the approach was to develop modules for other links in the value chain as well. Stephens said that these include trucks, railways, lake freight, and primary, terminal, and transfer elevators.

Last year the technical module and producer manual passed the technical review. The committee recommended a two-phase implementation approach. Phase 1, already implemented, made the producer manual available to producers to incorporate into Identity Preserved (IP) production contracts as markets demand. In Phase 2, the Management Committee will develop a business plan for a national management system that will provide HACCP-based food safety certification to farms. Implementation will take place once the committee sees sufficient producer interest and market demand.

Five pilot projects were conducted in 2005–2006 to determine the implications of introducing this certification to domestic and export grain sales. Stephens said that all were IP contracts, involving wheat, malting barley, canola, non-GMO soybeans, and mustard.

The pilots found that the system would be operationally feasible with an IP contract system for both container and bulk shipments, but would be difficult within the traditional non-IP bulk system. To maintain integrity, HACCP grain must be kept separate from non-HACCP grain by grade, requiring additional bins and possibly dedicated facilities. Stephens said costs varied significantly from farmer to farmer depending on farm management and current record keeping systems.

The pilots concluded that food safety planning and implementation requires total value chain participation, and food safety must be market pulled. No market premiums for HACCP grain means low farmer participation, with participation restricted to niche markets. Another challenge is that government programs do not support program costs, Stephens said, which may prevent implementation.

Stephens recommended that federal and provincial and territorial governments share program costs. This would provide public benefit, increase participation, enable "branding" of Canadian grain as "HACCP-produced," support Canadian farms as a "green" expenditure under the World Trade Organization, and enhance competitiveness of Canadian grain.

## Panel Discussion

Noting that there is still pushback from producers in terms of the costs of the program, a participant said an economic returns study is needed to demonstrate the benefits. He asked about the value of zoning different areas of the country for biosecurity purposes, and referred to the West Hawk Lake Zoning Initiative near the Manitoba/Ontario border.

Bellamy said zoning would protect at least part of the country's access to market in case of an outbreak. West Hawk's geography is unique, and its location allows monitoring of livestock traffic between eastern and western Canada. If it is possible to begin by splitting the country in half and enabling the capability to shut that door, he said, it is part of the way to zoning. However, a livestock traceability system is still needed to assure the international market that the animals are free of disease.

Moreover, Bellamy said, biosecurity plays a role in compartmentalization—the attempt to isolate one commodity. A good biosecurity auditing system must be in place to ensure markets that they can safely buy from that zone or compartment.

There are different ways to implement food safety, a participant said, such as a pure HACCP program, a HACCP-based program, or a sector-based program. She asked Dworkin how to distinguish between packaging that uses or does not use an HACCP program.

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Different food processors go to different suppliers and face different processes and systems, Dworkin said, but the PAC's system is HACCP-based. This was the direction PAC took since the food industry was already involved in HACCP. Those in the packaging industry applied HACCP principles to the manufacturing of packaging materials.

Kehler asked Stanger to discuss what might be the biggest barriers to working in partnerships up the value chain.

Stanger said the growing number of players will pose the biggest challenge, since involving more stakeholders will require longer timeframes to formulate consensus and achieve outcomes. Due to cost implications, for example, some may want to move faster, while others may need a slower pace.

A participant asked whether going to an on-farm food safety program would eliminate some of the bureaucracy of the current two-tiered food inspection system that covers transport of live animals and production of meat products.

Stanger said AAFC's role is to provide financial assistance through guidance funds while working with CFIA, which provides the technical expertise and recognition programs.

Galloway expressed CFA's gratitude to AAFC for its support and collaboration. As the ministers are meeting about the APF's next generation, she said, this kind of conference between government and representatives of the value chain reflects Stanger's comment that the views of all stakeholders are being counted.

From the CFIA's perspective, Brazeau said AAFC has formally been mandated to complete a cost-benefit analysis. Such an analysis is very important since a great deal of money and resources are being injected into the system.

## **Conference Wrap-up and Closing Remarks**

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Nicole Sillett, National Program Coordinator, Canadian Quality Milk Program for the Dairy Farmers of Canada

Nicole Sillett thanked the organizers, chairpersons, speakers, and participants for inspiring presentations and discussions. The day was a good example of how well partnerships can work, she said. She also thanked Agriculture Canada for providing travel funding. The participants were encouraged to fill out the evaluation form and look for the conference proceedings to be published shortly. Sillet invited participants to visit [www.onfarmfoodsafety.ca](http://www.onfarmfoodsafety.ca), the website dedicated to the Canadian approach to on-farm food safety.