

## Measuring Up: An Evaluation of the BC Trans Fat Initiative June 2010



### Background

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The high consumption of trans fat has been linked to heart disease accounting for an estimated 3,000 respective deaths every year in Canada.<sup>1</sup> In recognition of the harmful effects of industrially produced trans fat, the BC government announced in the 2008 Speech from the Throne its commitment to ban trans fat in prepared foods in restaurants and schools.

The Ministry of Healthy Living and Sport (MHLS) responded with the first health impediment regulation under the *Public Health Act*, passed on March 2, 2009. A partnership was formed with the Heart and Stroke Foundation of BC and Yukon (HSFBCY) to plan and implement the BC Trans Fat Initiative (the Initiative). Through extensive industry consultation and cross sector collaboration (see Appendix A), several resources were created to assist operators to meet the new regulatory requirements. Resources include a website ([www.restricttransfat.ca](http://www.restricttransfat.ca)), 8-1-1 *HealthLink BC* phone line, and translated informational materials.

Environmental Health Officers (EHOs) have been monitoring compliance with the regulation since September 30, 2009, as part of their routine food safety inspections.

### Objectives

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This report evaluates the goals of the Initiative which included:

1. BC food service establishments (FSEs) use products that meet the trans fat restrictions;
2. Resources and implementation supports developed for the food industry and EHOs are effective; and
3. Challenges for food industry in meeting the regulatory requirements are identified and addressed.

### Methods

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Several sources of information were used to evaluate the Initiative.

Health authority on-site inspection reports and voluntary documentation audits for chain food service establishments from October 1, 2009, to March 31, 2010, were used to measure compliance rates of food service establishments. Health authority status reports and action plans received in August 2009 and again in March 2010 also helped to inform overall compliance by the health sector. The number of visits to the trans fat website ([www.restricttransfat.ca](http://www.restricttransfat.ca)) and calls to/from the 8-1-1 *HealthLink BC* phone line were used to measure the usage of resources.

An on-line survey was conducted by the HSFBCY in March 2010 to understand the experience of EHOs and the food industry in implementing the regulation. Results from the survey captured the perspectives of 113 EHOs from all health authorities and 41 representatives of the food industry, including food service operators, distributors, suppliers and manufacturers. See Appendix B for details on the survey design and characteristics of respondents.

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<sup>1</sup> Estimates based on Harvard School of Public Health data found in the following study: Ascheria A Katan MB, Zock PL, Stampfer MJ, Willet WC. Trans fatty acids and coronary heart disease. *NEJM* 1999; 340 (25): 1994-8.

Although not formally part of the evaluation process, results from two student research projects completed in February 2010 at the British Columbia Institute of Technology (BCIT) Environmental Health (Public Health Inspection) Program were examined as well.<sup>2,3</sup>

## Results

### Objective 1. BC food service establishments (FSEs) use products that meet the trans fat restrictions.

Indicator:

- Percent of FSEs that meet the regulatory requirements

Regulatory compliance was determined in two ways:

- 1) on-site food inspection reports by EHOs in health authorities, and
- 2) a documentation audit for chain FSEs, a voluntary central review process for chains coordinated through the MHLS and EHOs in health authorities.

The documentation audit for chain FSEs was developed to assist with the EHO workload and streamline the enforcement process for multiple sites that serve food from a common menu. The documentation audit expedited the task of determining compliance for 46 chains by reducing the number and frequency of on-site inspections for trans fat compliance in the 2,659 sites that were represented by the chains.

Compliance results from October 1, 2009 to March 31, 2010, summarized in Table 1, show that the majority of FSEs inspected are compliant with the three regulatory requirements and that compliance rates have improved since the regulation came into effect. EHOs continue to take a progressive enforcement approach which focuses on education and information.

**Table 1: Regulatory Compliance Results**

\*The majority of chain food service establishment audits took place in the first quarter. Some chains were still working with health authorities towards compliance for the 5 percent restriction in the second quarter which is reflected in a lower compliance rate in April 2010. Overall results for the documentation audit remain high.

Regulatory Requirements	Chain Food Service Establishment Audits*		Health Authority Inspections	
	1 <sup>st</sup> quarter (January 2010)	Cumulative Total (April 2010)	1 <sup>st</sup> quarter (January 2010)	Cumulative Total (April 2010)
Number of audited/inspected FSEs	2,303	2,659	3,406	8,846
<u>Requirement 1:</u> % of FSEs that meet documentation requirements	97%	98%	70%	73%
<u>Requirement 2:</u> % of FSEs that meet 2% trans fat restriction	100%	100%	86%	87%
<u>Requirement 3:</u> % of FSEs that meet 5% trans fat restriction	90%	82%	81%	81%

<sup>2</sup> Jaeckel, M. (2010) The BC Trans Fat Regulation: a metro Vancouver restaurant owner and consumer perspective research project.

<sup>3</sup> Nair, M. (2010) Perception of BC EHOs on Trans Fat Regulation: A Survey of BC EHOs.

In addition to the on-site inspections and documentation audit, the MHLS requested a plan from all health authority food service operations to determine regulatory compliance. The Health Authority Trans Fat Regulation Action Plans indicated that centralized food services in all health authorities reached full compliance by March 31, 2010.

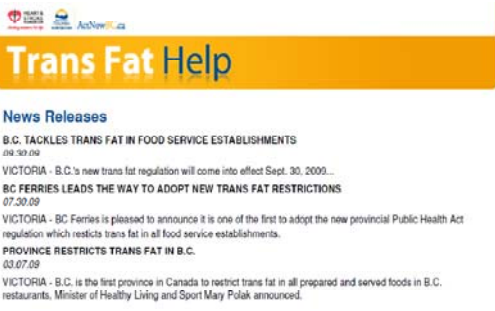

**Objective 2. Resources and implementation supports for the food industry and EHOs are effective.**

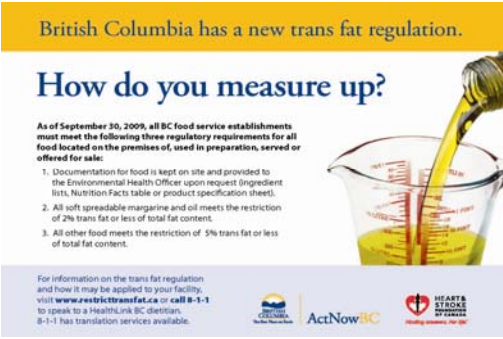


Indicator:

- Use and reach of resource and implementation support;
- Percent of EHOs that rated resources and implementation supports as effective; and
- Percent of food industry that rated resources and implementation supports as effective.

Table 2 displays the resources developed to support the implementation of the BC Trans Fat Regulation and evaluates their effectiveness measured by usage, reach and survey findings. The HSFBCY Survey findings are from EHOs and food industry responses to questions about their use of the resources to help them learn about the regulatory requirements and how to measure/reach compliance.

**Table 2: Effectiveness of Resources**

Resources	Evaluation Indicators
<p><b>Publications and Media</b></p>  <p><b>News Releases</b>            B.C. TACKLES TRANS FAT IN FOOD SERVICE ESTABLISHMENTS  <small>09/30/09</small>            VICTORIA - B.C.'s new trans fat regulation will come into effect Sept. 30, 2009...            BC FERRIES LEADS THE WAY TO ADOPT NEW TRANS FAT RESTRICTIONS  <small>07/30/09</small>            VICTORIA - BC Ferries is pleased to announce it is one of the first to adopt the new provincial Public Health Act regulation which restricts trans fat in all food service establishments.            PROVINCE RESTRICTS TRANS FAT IN B.C.  <small>03/07/09</small>            VICTORIA - B.C. is the first province in Canada to restrict trans fat in all prepared and served foods in B.C. restaurants. Minister of Healthy Living and Sport May Polak announced.</p>	<p><b>Usage and/ or Reach</b></p> <p>Articles featured in professional and trade publications including: BC Restaurant News; BC Medical Journal; The Publican; Chef's Quarterly and BC Food Processors, totalled a readership of approximately 27,075 people. News releases were prepared from the MHLS when the regulation was passed and when it went into effect.</p> <p><b>HSFBCY Survey Findings</b></p> <p>The majority (29 %) of food industry respondents (n=38) reported first hearing about the regulation through media outlets (television, radio, newspaper).</p>
<p><b>Tradeshows and Events</b></p>  <p><b>Restricting trans fat in menu items</b></p> <p>Just a little oil change!</p>	<p><b>Usage and/ or Reach</b></p> <p>Several tradeshows and events were attended with information and resources: BC Hospitality Expo; BC Foodservice Expo; Dietitians of Canada BC Regional Spring Conference; Grocery Showcase West 2009; Neptune Foodservices Trade Show; Sysco Trade Show; Bakery Congress; BC Food Processors Food Pro Conference; CAFP Presentation; Richardson Oilseed Baking Forum; GFS Tradeshow; BC Food Protection Association Conference.</p> <p>The events engaged 1,960 people, primarily food industry, food service operators, food distributors and suppliers and their representatives.</p> <p><b>HSFBCY Survey Findings</b></p> <p><b>85%</b> of food industry respondents (n=20) who participated in tradeshows or events found them effective.</p>

Resources	Evaluation Indicators
<p><b>‘How do you measure up?’ information cards</b></p> 	<p><b>Usage and/ or Reach</b></p> <p>45,000 information cards were distributed to EHOs, food industry representatives and food service operators. Another 16,000 information cards were translated to Chinese, Punjabi, Korean, Vietnamese and Farsi and were available to EHOs and for general mail out upon request.</p> <p><b>HSFBCY Survey Findings</b></p> <p><b>97%</b> of EHOs (n=95) who used the ‘How do you measure up?’ information card found this effective.</p> <p><b>94%</b> of food industry respondents (n=17) who used the ‘How do you measure up?’ information card found it effective.</p>
<p><b>Website (www.restricttransfat.ca)</b></p> 	<p><b>Usage and/ or Reach</b></p> <p>11,858 people visited the trans fat website between May 2009 (launch) and June 6, 2010. Although the majority of use was from within BC, the website received visits from many other countries including India, the UK, Australia, Ireland, Russia and Malaysia.</p> <p><b>HSFBCY Survey Findings</b></p> <p><b>88%</b> of EHOs (n=49) who used the trans fat website found it effective.</p> <p><b>96%</b> of food industry respondents (n=26) who used the trans fat website found it effective.</p>
<p><b>HealthLink BC Phone Line</b></p> 	<p><b>Usage and/ or Reach</b></p> <p>One-to-one telephone support was available for the food industry and EHOs through Dietitian Services at <i>HealthLink BC</i>.</p> <p>As of June 6, 2010, 292 calls were taken from callers around the Province. An additional 179 food service operators were called in remote areas of the Northern and Interior Health Authorities to raise awareness about the regulation and to support implementation of the requirements.</p> <p><b>HSFBCY Survey Findings</b></p> <p><b>75%</b> of EHOs (n=28) who used the <i>HealthLink BC</i> phone line found it effective.</p> <p><b>78%</b> of food industry respondents (n=9) who used the <i>HealthLink BC</i> phone line found it effective.</p>

EHOs played an important role in educating food service operators about the Trans Fat Regulation during routine food safety inspections. EHOs raised awareness of the regulation with operators; helped operators to calculate percent trans fat of total fat in food products; and helped operators to determine documentation requirements (HSFBCY survey). BCIT student researcher (Nair) found that of EHOs surveyed (n=66), only 26 percent found that food service operators understood the regulatory requirements on their inspection visits, highlighting the importance of EHOs in this role.

The MHLS conducted training in all health authorities in the Spring 2009 to assist EHOs to understand the regulation and consistently enforce the regulation around the Province. The majority (83 percent) of attendees found the training effective. Similar results were found for rating the effectiveness of the trans fat inspection report/enforcement reference. Training materials were also provided to the BCIT Environmental Health (Public Health Inspection) Program to incorporate into the curriculum.

In addition, a BC Trans Fat Regulation module was included in the new FOODSAFE™ Level 2 virtual online course available through Open Schools BC ([www.openschool.bc.ca/foodsafef/infopage.html](http://www.openschool.bc.ca/foodsafef/infopage.html)). The module assists participants to understand the regulation and how to meet the requirements.

**Objective 3. Challenges for food industry in meeting the regulatory requirements are identified and addressed.**

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Indicator:

- Number of food industry representatives consulted; and
- Number of actions taken to address anticipated barriers to compliance.

Over 100 representatives from the food industry, health authorities and public stakeholders were consulted between the Fall of 2008 and March 2009 to anticipate challenges in meeting the regulatory requirements for food operators. These consultations included face to face meetings, teleconferences, emails, phone inquiries through the *HealthLink BC* phone line, and the multi-sector Provincial Trans Fat Advisory Committee (See Appendix C for membership). Experiences from New York City and the Calgary Health Region also helped to identify potential challenges to meeting the regulatory requirements in BC and informed planning for the Initiative.

Table 3 outlines challenges indentified from the consultations which were met with reciprocal actions by the Initiative.

**Table 3: Challenges and Reciprocal Actions**

Food Industry Challenges	BC Trans Fat Initiative Actions
How to reach the small mom and pop operators, ethnic operators, and rural/remote communities	<ul style="list-style-type: none"> <li>✓ Translated resources</li> <li>✓ HealthLink BC phone line</li> </ul>
How to address “mixed” products which contain both naturally occurring and industrially produced trans fat; Finding alternative compliant products; Knowing what type of documentation was required	<ul style="list-style-type: none"> <li>✓ Trans fat website (product lists, documentation Q&amp;A, operator tip sheets, consumer resource)</li> <li>✓ HealthLink BC phone line</li> </ul>
Having enough time necessary to change menus and reformulate	<ul style="list-style-type: none"> <li>✓ Resources and supports launched five months before regulation enforcement</li> </ul>
Inconsistent enforcement approaches; Understanding the regulatory requirements and knowing where to find the resources	<ul style="list-style-type: none"> <li>✓ Health Authority updates for EHOs</li> <li>✓ ‘How do you measure up?’ information cards</li> </ul>

The HSFBCY survey found that a third of industry respondents experienced no significant challenges to meeting the regulatory requirements (n=38).

Another third of respondents reported difficulties meeting the documentation requirements. Similarly, “getting the required documentation” and “understanding documentation requirements” were reported by the majority of EHO respondents (59 percent and 48 percent respectively) as challenges faced by operators in meeting the regulatory requirements.

To meet requirements of the BC Trans Fat Regulation, food service operators are required to have an ingredient list and/or Nutrition Facts Table or product specification sheet for all food used on site except for fresh fruits and vegetables, eggs, raw meat, fish or poultry. This is consistent with nutrition labelling for all food required by Health Canada and enforced by the Canadian Food Inspection Agency. Several HSFBCY Survey respondents commented that a more descriptive, detailed or pictorial representation of the regulatory documentation requirements such as a flow chart may have helped achieve the requirement easier and faster. EHOs may have been better equipped to assist operators on documentation requirements if there had been more collaboration with the Canadian Food Inspection Agency inspectors who enforce labelling regulation. These are priority actions going forward.

## **Conclusion**

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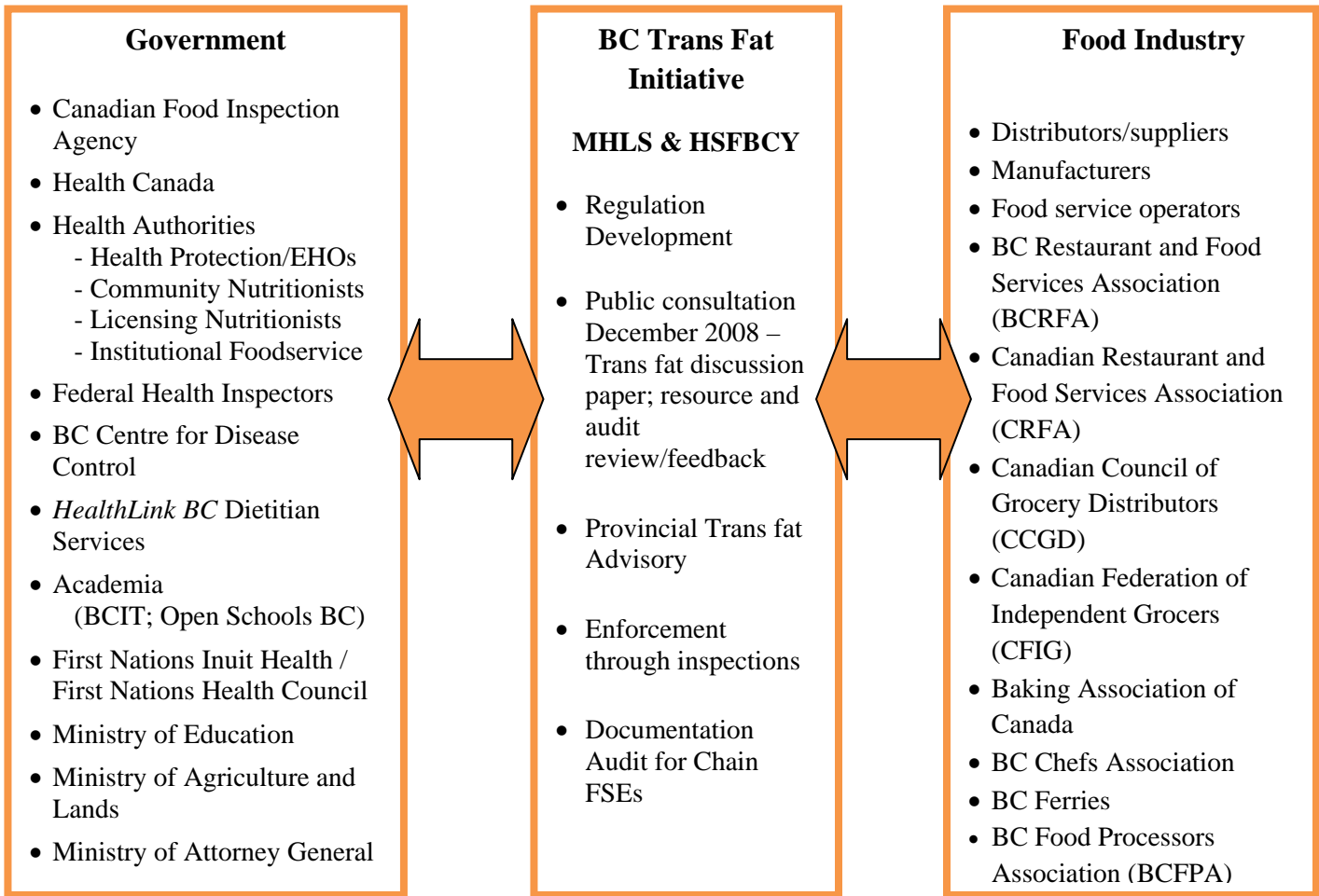
The BC Trans Fat Regulation has been successfully implemented and supported. The MHLS and HSFBCY continue to provide ongoing support to maintain and improve compliance and education.

As the first healthy eating regulation in Canada, lessons learned from the BC Trans Fat Initiative are invaluable as we move forward with new healthy eating initiatives aimed to support the health of all British Columbians:

- Provide a variety of education resources and supports to meet the needs of all stakeholders;
- Collaborate with stakeholders and capitalize on champions and experts in the field;
- Plan a comprehensive communications/consultation strategy; and,
- Simplify the regulatory language for end users.

## Appendix A

### Examples of cross-sector collaboration and partnerships that contributed to the success of the BC Trans Fat Initiative



## Appendix B

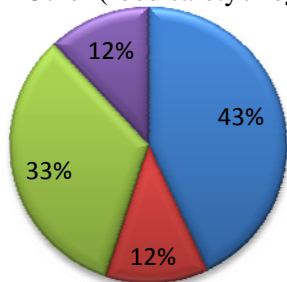
### Survey Design and Characteristics of Respondents

Two online surveys were conducted by the Heart and Stroke Foundation of BC and Yukon between March 15 -29, 2010, using Survey Monkey. One survey was distributed through the Health Protection Directors in all health authorities for BC Environmental Health Officers and the other was distributed through members of the Provincial Trans Fat Advisory for the food industry including food service operators, manufacturers and distributors. The industry survey was also available from the trans fat website ([www.restricttransfat.ca](http://www.restricttransfat.ca)).

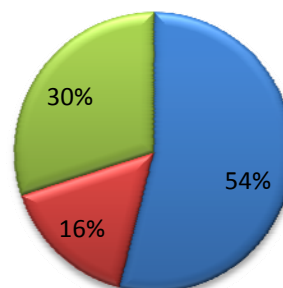
The purpose of the surveys was to gain an understanding of the experience of EHOs enforcing the Trans Fat Regulation and of the food industry implementing the regulatory requirements in order to best support stakeholders through the implementation and enforcement phases of the new healthy eating regulation. Together the surveys collected 154 responses: 113 EHOs from around the Province and 41 representatives from the food industry.

**Figure 1: Industry Survey Respondents Based On Position**      **Figure 2: Geography of Industry Operation**

- Food service operator/owner, other staff (ie. chef)
- Food distributor
- Food manufacturer
- Other (food safety / regulation)

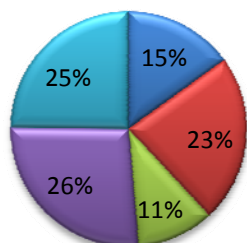


- BC based
- National
- International



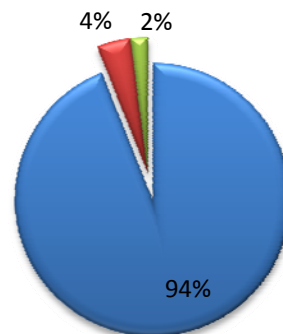
**Figure 3: EHO respondents based on health authority**

- Vancouver Island Health Authority
- Interior Health Authority
- Northern Health Authority
- Vancouver Coastal Health Authority
- Fraser Health Authority



**Figure 4: Distribution of EHO survey respondents based on position**

- EHOs
- Managers
- Health Protection Directors



## Appendix C

### Provincial Trans Fat Advisory Committee Membership (as of April 1, 2010)

Diego Marchese, VP of Research and Health Promotion, Heart and Stroke Foundation of BC & Yukon

Lisa Forster-Coull, Provincial Nutritionist, Ministry of Healthy Living and Sport

Lorrie Cramb, Manager, Healthy Eating, Ministry of Healthy Living and Sport

Elietha Bocskei, Policy Analyst, Ministry of Healthy Living and Sport

Matt Silver, Communications, Ministry of Healthy Living and Sport

Ralph Tschenscher, Western Division Manager, Baking Association of Canada

Sharron Tulk, Director of Member Relations and Marketing, BC Restaurant and Foodservices Association

Mark von Schellwitz, Vice President, Western Canada, Canadian Restaurant and Foodservices Association

Sean McPhee, President, Vegetable Oil Industry of Canada

Allen Langdon, Vice President, Western Region, Canadian Council of Grocery Distributors

Don Gyurkouits, President, BC Chef's Association

Stephanie Suski, Healthy Food Supply Dietitian, Dietitian Services at *HealthLink BC*

Barb Leslie, Director, Dietitian Services at *HealthLink BC*

Nico Human, CEO, BC Food Processors Association

Gary Sands, Vice President, Canadian Federation of Independent Grocers

Greg Thibault, Manager of Public Health Protection, Northern Health Authority

Richard Taki, Regional Director of Health Protection, Vancouver Coastal Health

Inderjeet Gill, Manager of Public Health Protection, Fraser Health Authority

Anna Bozac, Representative for BC Health Authorities Food Service Technical Team

Lynn Wilcott, Acting Program Director, Food Protection Services, BC Centre for Disease Control

Sion Shyng, Food Safety Specialist, BC Centre for Disease Control

Lloyd Watt, Manager, Canadian Ingredient/Bakery Division, Richardson Oilseed Ltd

Lance Hill, Food Liaison Officer, Health Canada

Cathy Richards, Community Nutritionist, Interior Health Authority