DEADLY BACTERIA STRIKE CANADIANS

Introduction

Focus

A recent outbreak of listeriosis, one of many food-borne illnesses, has killed 20 Canadians and been responsible for the serious illness of at least 60 others. This News in Review story looks at the causes and results of that outbreak and the response of both public health agencies and Maple Leaf Foods, one of the industry's major players.

Update

As this issue of News in Review was being completed, new revelations appeared about the scale of the Listeria outbreak and the fact that Toronto Health authorities had clear knowledge that Maple Leaf meat products were highly contaminated well before the official alert. As well, recent tests suggest that the contamination is still a problem at the Maple Leaf processing plant. To stay informed about this tragic and continuing story, consider a visit to www.cbc.ca.

Food-borne illnesses are by no means unusual. According to the World Health Organization (www.who.int), up to 30 per cent of the population of developed countries suffers from a food- or waterborne illness every year.

In 2008, for example, a massive outbreak of salmonellosis severely sickened over 900 people in 40 different states in the U.S. The ultimate source of the infection was never identified. In China, more than 54 000 infants were made ill by drinking formula that had been laced with melamine. (Melamine is used by unscrupulous manufacturers to raise the apparent protein level of adulterated milk.)

Not even our pets are safe. In 2007, a company in Mississauga, Ontario, was forced to recall 95 brands of dog and cat food, fearing they contained rat poison from a Chinese-supplied wheat gluten that had been used in their manufacture. Several pets died after eating the food, and the recall turned into one of the largest food recalls in North American history.

The Threat of Listeriosis

As food-borne illnesses go, however, listeriosis, caused by the *Listeria monocytogenes* bacterium is fairly unusual. In all of Canada there are usually only about 60 identified cases in any given year. But when listeriosis does strike, the results can be devastating. It is a disease that is especially hard on the very young and the very old.

In 1981, coleslaw infected with *Listeria* sickened 48 people in the Maritime provinces. Twelve of them died; almost all were infants. In 1985, 48 people in Los Angeles—most of them babies—died after eating cheese

contaminated with the bacteria. And the largest food recall in United States history took place in 2002, when Wampler Foods was forced to recall 27 million pounds of deli meats after an outbreak of listeriosis was caused by some of its products. The cost to the company was \$85-million.

The Food-safety Issue

An outbreak on the scale of the recent *Listeria* infection—20 people dead and at least another 60 seriously ill—tends to raise questions about food safety in Canada. The federal government was swift in its attempts to assure Canadians that everything was under control. According to the health minister, as we shall see in the video portion of this review, "... while this situation is, of course, tragic, it is important to note that this is an example of where our surveillance system worked."

As the crisis developed, however, others were quick to differ. Opposition parties claimed that the government had plans to turn more of the responsibility for monitoring food safety over to the food processors themselves, and that it was already implementing these plans. The union representing food-safety inspectors claimed that its members were overworked and unable to properly perform their jobs. It was also revealed that the United States has tougher rules for preventing *Listeria*—rules that Canada tried to get the United States to waive for the inspection of Canadian products bound for U.S. markets.

Observers also questioned the amount of time it had taken to identify the size and severity of the outbreak and its likely source. The first case of listeriosis was identified in June; it was August 17

Further Research

The Maple Leaf action plan is available at www.mapleleafaction. com.

before the public was informed that it should avoid some of the products from Maple Leaf Foods. Foods made with its processed meats were still being recalled in September.

Maple Leaf Foods

The organization that has received the most positive press during the listeriosis outbreak is, oddly enough, the company responsible for the contamination: Maple Leaf Foods. Under the leadership of Michael McCain, its president, the company quickly acknowledged fault, apologized publicly, and promised to do everything it could to prevent future problems. It issued a recall on all products that could possibly have been in contact with *Listeria*, closed the plant, and postponed its re-opening until the source of the contamination had been identified and sterilized. The company also published an action plan it will follow to prevent future contamination.

Maple Leaf Foods anticipates that the recall will cost the company about \$20-million. It also faces a series of class-action lawsuits that have already been filed on behalf of Canadians infected by *Listeria* in Maple Leaf products. But the company's quick action in acknowledging its role has led many observers to conclude that the company will survive the crisis and that Canadians will continue to buy its products.

The incubation period for *Listeria* is up to 70 days. This period has passed, so the last cases of listeriosis caused by contaminated Maple Leaf products have probably already been reported. The issue of food safety, however, will likely remain in the public eye for some time to come. The government has promised a review of the country's food-safety system. That report is due in March 2009.

For Discussion

In a small group, discuss and respond to the following questions:

	Who should bear the biggest responsibility for ensuring that Canada's food system is safe? Should individual corporations be responsible for most of the day-to-day inspection of processed foods? Or should the government take the lead in all food inspection matters? Is there a fair way to divide the responsibilities between the public and private sectors that will ensure that the system will function safely?
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2.	In what way, if any, was your family affected by the listeriosis outbreak?
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Υου	may wish to return to this discussion after you watch the video.

DEADLY BACTERIA STRIKE CANADIANS Wideo Review

Answer the questions in the spaces provided.

1.	What happens to the <i>Listeria</i> bacterium when it is refrigerated?
2.	When was the first case of <i>Listeria</i> infection diagnosed in Toronto?
3.	What event indicated to Toronto Public Health that it was likely facing a major <i>Listeria</i> problem?
4.	When did Canadian food inspectors first take samples at the Toronto Maple Leaf Foods plant?
5.	When did Ontario finally alert public health agencies to the likelihood of a Listeria outbreak?
6.	When was the general public first informed of the outbreak?
7.	What statement did Health Minister Tony Clement make about the outbreak?
8.	How does academic Sylvain Charlebois describe communication between the various levels of government on food safety issues?
9.	Which individual accepted full responsibility for the outbreak of listeriosis?
10.	The Canadian Food Inspection Agency held a recent internal review. What doe Laurie Graham identify as "perhaps the most serious problem" it found?
11.	What does Stephen Harper say the government is doing to promote food safety?
12.	Which government minister was criticized for making jokes about the listeriosis outbreak?

	Discussion In defending Gerry Ritz, Stephen Harper said: "I suspect everybody in this room, if they're honest with themselves, will admit in private conversations they probably said things that were pretty insensitive and inappropriate if somebody shone a light on them." Is this a sufficient response to Ritz's indiscretion, or should he have been asked to resign as Minister of Agriculture?
2.	Many commentators have been critical of the length of time between when health officials first suspected Maple Leaf Foods of being the source of the outbreak and the notification of the public to be on the alert. Do you believe that public health should have been quicker to inform the public of its suspicions, even without confirmation of the source of the infection? Why or why not?

DEADLY BACTERIA STRIKE CANADIANS The Crisis

It was in late June 2008 that public health officials identified the first case of an outbreak of food-borne illness in Toronto. A 36-year-old pregnant woman was diagnosed with listeriosis, a bacterial infection caused by the bacterium *Listeria monocytogenes* (commonly referred to just as Listeria). Listeriosis is potentially fatal and very dangerous, especially to pregnant women, young children, and the elderly. Because of this, all cases of listeriosis must be reported to public health officials whenever they are diagnosed. While it is not uncommon for 10 to 15 cases to be diagnosed in Ontario in any given year, multiple cases in one month are more unusual.

In mid-July, a nursing home in Toronto reported two cases, and Toronto Public Health collected samples of food at that institution for testing. These were sent to the Health Canada laboratory in Ottawa. As more cases came to light, the Ontario Ministry of Health alerted local health units to be on the lookout for *Listeria* infections. They also instructed the local units to send in samples of any human cases to them for DNA testing of the bacteria involved. Matching the DNA is how health services are able to identify a common source of the infection.

On August 5, 2008, Toronto Public Health received confirmation that the nursing home food was indeed contaminated with *Listeria*. Toronto passed this information on to the Canadian Food Inspection Agency (CFIA – www.inspection.gc.ca), which began its investigation. The CFIA collected food samples from a number of food processors and suppliers. Among these suppliers was the huge Maple Leaf Foods production plant in Toronto.

Late on the evening of August 16, the

CFIA informed Maple Leaf Foods that samples of roast beef and corned beef from two of its production lines tested positive for *Listeria*. The following day the company announced the recall of about 70 000 kilograms of meat produced under the Sure Slice name (mostly for institutional use). This was later expanded to a range of 20 ready-to-eat meat products—500 000 kilograms in total. The Toronto plant was closed for inspection and cleaning.

As the CFIA alerted stores and fastfood restaurants that they should pull these products from their shelves, the Ontario Ministry of Health announced an official outbreak of listeriosis in the province.

The Crisis Spreads

By August 17, Canada's National Microbiology Laboratory (www.nml-lnm.gc.ca) in Winnipeg had, through DNA evidence, confirmed that 17 cases of listeriosis in Canada had the same fingerprint. Their DNA matched that of the *Listeria* identified in products from the Toronto Maple Leaf plant.

The problem was now nationwide. Of the 17 cases, 13 were in Ontario, two in British Columbia, and one each in Saskatchewan and Quebec. At least another 29 cases were under investigation.

Maple Leaf Foods quickly identified the two lines it believed responsible for the outbreak and announced that the products involved had likely come off the line sometime in July. However, for safety reasons, the company determined to recall almost all of the plant's production before its August closing. By the end of August this amounted to more than 230 different products sold

Did you know . . .

Four months before the Maple Leaf outbreak started claiming lives, Canada's food safety agency quietly dropped its rule requiring meatprocessing companies to alert the Canadian **Food Inspection** Agency about Listeriatainted meat. Before April 1, if a company preparing meat for sale to the public had a positive test showing Listeria it would have had to bring it to the (federal) inspector's attention, and the inspector would have been involved in overseeing the cleanup (Toronto Star, October 6, 2008).

in grocery stores and used by fast-food chains across the country. Some of the products recalled had "best by" dates as late as January 2009.

By the end of August, the *Listeria* strain from the Maple Leaf plant had been identified in 15 deaths. Five of these were determined to have listeriosis as the underlying cause or as a contributing cause. Twenty-nine cases had been linked to the outbreak, and another 36 were under investigation.

Fallout

It was September 17 before Maple Leaf Foods reopened its Toronto plant. By then its stock had declined dramatically, and many observers speculated that it might never recover the market share it had held in processed meats before the listeriosis outbreak. The recall alone was expected to cost the company at least \$20-million. Maple Leaf Foods also faces a series of class-action lawsuits filed in several different provinces.

Most public health officials believed by that time that the worst was over; a potential 70-day incubation period for the illness was just about up.

Nevertheless, the deaths were to continue into October. By October 3, there were 53 confirmed cases and another 10 suspected cases. *Listeria* was the underlying or contributing cause in 20 deaths. Six more deaths remained under investigation.

Food safety became an issue in the federal election campaign. Opposition parties accused the Conservatives of planning a reduction in the budget for food inspection and the number of food inspectors. The president of the union representing CFIA inspectors called for a full inquiry into food inspection in Canada, arguing that the agency is too short-staffed to do a proper job. The government promised a review of the country's food-safety system.

Follow-upThis *News in Review* story went into production on October 8, 2008. The last

date included in this timeline was October 3, 2008. Update the timeline from October 3 to the time you explored this story with your class. What additional information needs to be added to the timeline? What has changed since October 3, 2008? Are new food safety regulations in place? Were there any further deaths? Have there been any additional outbreaks?
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DEADLY BACTERIA STRIKE CANADIANS Listeria: *A Profile*

Further Research

An excellent source of material on *Listeria* and listeriosis is Health Canada at www.hc-sc.gc.ca/hl-vs/iyh-vsv/food-aliment/listeria-eng.php.

Ouote

"The most important thing with Listeria is for people to understand it's a rare infection. It can be severe. Luckily for most of us who are healthy, what happens is we may come across it . . . and our gut usually takes care of it." — Dr. Elizabeth Richardson, Hamilton's medical officer of health (Hamilton Spectator, August 22, 2008)

Until recently, the bacterium *Listeria monocytogenes* was not well known to Canadians. *Listeria*, while present throughout the environment, is only involved in about 60 Canadian cases of food-borne illness in any given year. Nevertheless, given the opportunity, *Listeria* can strike with devastating effect. The following is a profile of the bacterium and of listeriosis, the disease it can cause.

Where is Listeria found?

The *Listeria monocytogenes* bacterium can be found in both food and water, and is often discovered in manure-based fertilizers. Farm animals often carry it. From these sources it can, in turn, contaminate vegetables and other food products.

In what food products is it often found?

Listeria is usually associated with vegetables and other raw foods, such as uncooked meat. Cooking easily destroys the bacterium. However, Listeria can also contaminate processed foods if they are exposed to it after processing or during storage. Two of these foods are soft cheeses and cold cuts. Cold cuts were the villain in the recent Maple Leaf foods outbreak.

How did Listeria get into the Maple Leaf products?

Officials believe that the bacteria had built up in one or more of the slicing machines on Maple Leaf's production lines and were transferred to the processed meats just before packaging. How the bacteria made their way into the plant remains undetermined.

If the processed food was properly refrigerated, why did the bacteria continue to develop?

Listeria is a rare bacterium in that it thrives and grows under refrigeration; cold temperatures retard the growth of most other bacteria. This also means that Listeria has little competition from other contaminants when refrigerated and can reproduce rapidly.

Who is at risk from Listeria infections?

Most healthy adults who develop listeriosis, the infection caused by exposure to *Listeria*, will recover with little problem. Often they will show no symptoms of the infection. Those most at risk are the very young, the elderly, pregnant women (who can transfer the infection to their fetuses), and those with compromised immune systems.

How deadly is listeriosis?

According to Health Canada, *Listeria* is more likely to cause death than any other bacterium. Up to 30 per cent of infections in high-risk cases are fatal.

What are the symptoms of listeriosis?

Most healthy people who develop listeriosis to the point where it shows symptoms believe they have a case of food poisoning, with vomiting, nausea and diarrhea. Fever and severe headache are other symptoms. For those more vulnerable individuals, blood poisoning or meningitis may develop, with fatal results.

How long does it take for symptoms to develop?

The average incubation period for those who develop serious listeriosis symptoms is three weeks, but for some people the disease can take up to 70 days to develop.

Why is listeriosis especially serious for pregnant women?

A woman who is pregnant may only show minor symptoms of listeriosis, but

pass on a much more severe form of the disease to her unborn child. She may miscarry as a result of the illness, give birth prematurely, or give birth to a child who is very ill. According to the Centers for Disease Control and Prevention in the United States, about one-third of listeriosis cases in the country happen during pregnancy. Furthermore, pregnant women are 20 times more likely than other healthy adults to get the disease.

Follow-up

. Do you eat processed meats? Do you remember what you felt when you first heard that some processed meat had become contaminated with deadly bacteria in the summer of 2008?
Do you know anyone affected by the listeriosis outbreak? If so, what happened?
Have you, or has anyone in your family, changed their eating habits because of the listeriosis outbreak? Explain.

DEADLY BACTERIA STRIKE CANADIANS The McCain Family

Further Research

Information on McCain Foods is available from the CBC at www.cbc.ca/money/story/2004/03/19/mccainbiz_040319. html. See also the corporate Web site at www.mccain.ca.

Did you know . . .

Both Harrison and Wallace McCain have been much praised for their philanthropic activities in New Brunswick. The McCains are often described as one of the most generous families in New Brunswick history. Wallace's wife, Margaret McCain, was New Brunswick's first female Lieutenant Governor.

Further Research

Biographies of all three McCains at Maple Leaf Foods are available on the Maple Leaf Web site at investor. mapleleaf.ca/phoenix. zhtml?c=88490& p=irol-govboard. The man at the centre of the recent *Listeria* outbreak was the president of Maple Leaf Foods, Michael McCain. McCain is a member of one of the most successful Canadian business families. The McCains of Florenceville, New Brunswick, have created one of the greatest commercial food empires in the world. The root of that empire is the lowly potato.

The family began planting potatoes in New Brunswick in 1910 and became well-known potato farmers and potato dealers. But it was two brothers—Harrison and Wallace McCain—who made the decision to expand the business into the production of frozen french fries. In 1956, with financial assistance from the provincial government, they opened their first plant. In 1957, with 30 employees, they produced 680 kilograms of fries per hour. Sales for the year amounted to \$152 678.

In less than 10 years McCain Foods captured almost all of the Canadian market for frozen french fries and had become one of New Brunswick's major employers. To expand their business they chose England over the United States, thus avoiding competition with established U.S. producers. The move proved to be a sound one; the company is now the world's largest producer of french fries, with factories on six continents. McDonald's Restaurants is one of its biggest customers.

In addition to potato products, the company produces frozen vegetables, desserts, frozen pizzas, juices, meats, and cheese products. Other McCain Group companies are engaged in transportation, seed, animal feed, farming, and heavy equipment manufacturing. In 2003, sales in the processed food division alone totalled \$6.4-billion.

A Falling Out

With success, however, came a family feud. Wallace and Harrison were unable to agree on who should lead the company once they were gone. Wallace wanted his son Michael to take over; Harrison wanted to bring in an outside manager.

The fight eventually ended up in court, and the judge sided with Harrison. After a nasty boardroom battle, Wallace was forced out. In 1995, at age 64, he purchased Maple Leaf Foods in Toronto, where he remains chairman of the board of directors. Two of his sons—Michael and Scott—joined him in Toronto. Michael became president and CEO (Chief Executive Officer) of Maple Leaf Foods.

Michael McCain was well prepared for a job as CEO of either McCain Foods or Maple Leaf Foods. Prior to taking over the U.S. operations of McCain Foods, a post he held before his father's feud with his uncle, he earned a BA from Mount Allison and an MBA from the Ivey School at the University of Western Ontario.

Under Michael McCain. Maple Leaf Foods divested itself of underperforming divisions and acquired some of its main rivals, including Schneider Corporation, which became one of Maple Leaf's major brands. McCain now heads a company that employs 23 000 people in meat processing and packing, bakeries, and other operations across Canada and the United States. In 2007, the company made sales of over \$5.2-billion. Since 2006 it has been concentrating its efforts on branded meat and bakery products—pre-packaged products like those involved in the recent recall

The recall itself is expected to cost the company at least \$20-million—and

Quote

"Going through the crisis there are two advisers I've paid no attention to. The first are the lawyers, and the second are the accountants. It's not about the money or the legal liability, this is about our being accountable for providing consumers with safe food." Michael McCain. quoted in *The Globe* and Mail, August 25, 2008

this is before the expenses of the court cases it will have to fight in the growing number of class-action lawsuits.

Responding to Disaster

Canadians (and Canadian business people) may well remember Michael McCain best for the way he met the *Listeria* crisis head on.

McCain immediately accepted responsibility for the outbreak, refusing to blame anyone else—including inspectors from the Canadian Food Inspection Agency, who had failed to

find *Listeria* in the company's products. He apologized to Canadians in print and placed a televised apology on YouTube. The company also has placed its action plan to prevent further problems on its Web site at www.mapleleafaction.com.

It will be some time before the full effect of the *Listeria* outbreak on Maple Leaf Foods and the McCain family's fortunes is known. Many commentators believe, however, that Michael McCain's heartfelt and honest reaction will do much to ensure the company's rapid recovery.

Follow-up

1.	What might have gone through Michael McCain's mind when he first heard that his company may have been linked to an outbreak of <i>Listeria</i> ? What might his concerns have been?
2.	Why do you think he made such a strong, open declaration of responsibility in the wake of the outbreak? Do you think this was a good decision?
3.	Some people have said that Michael McCain should consider running for public office. Why might these people believe McCain would make a good politician? Do you agree?

DEADLY BACTERIA STRIKE CANADIANS Avoiding and Treating Listeriosis

The methods for individuals to avoid listeriosis are similar to those for avoiding any food-borne bacterial infection. The following instructions are given by the Canadian Food Inspection Agency (www.inspection.gc.ca/english/fssa/concen/cause/listeriae.shtml).

You can minimize your chances of contracting listeriosis (as well as other food-borne illnesses) by following these steps.

- Read and follow all package labels and instructions on food preparation and storage.
- After handling foods in the kitchen, especially raw foods such as meat and fish, thoroughly clean and sanitize all surfaces used for food preparation with a kitchen sanitizer (following the directions on the container) or use a bleach solution (5 ml of household bleach to 750 ml of water), and rinse with water.
- To avoid cross-contamination, clean all knives, cutting boards, and utensils used with raw food before using them again.
- Thoroughly clean fruits and vegetables before you eat them.
- Refrigerate or freeze perishable food, prepared food, and leftovers within two hours.
- Defrost food in the refrigerator, in cold water, or in the microwave, but never at room temperature.
- Keep leftovers for a maximum of four days only and reheat them to an internal temperature of 74°C (165°F) before eating them.
- Check the temperature in your refrigerator using a thermometer to make sure it is at 4°C (40°F) or below. As the storage temperature increases,

- so does the growth of *Listeria* in foods. The higher the number of bacteria in foods, the greater is the risk of getting sick.
- Frequently wash and disinfect the refrigerator. The more often it is cleaned, the less chance there will be for *Listeria* to be transferred from contaminated food and surfaces to noncontaminated foods.

The Centers for Disease Control and Prevention (CDC) in the U.S. supplies a list of special measures to be taken by people at high risk of developing an infection if they are exposed to *Listeria* (www.cdc.gov/nczved/dfbmd/disease_listing/listeriosis_gi.html#treated). These include:

- Do not eat hot dogs, luncheon meats, or deli meats unless they are reheated until steaming hot.
- Avoid getting fluid from hot dog packages on other foods, utensils, and food preparation surfaces, and wash hands after handling hot dogs, luncheon meats, and deli meats.
- Do not eat soft cheeses such as feta, brie, and Camembert, blue-veined cheeses, or Mexican-style cheeses such as queso blanco, queso fresco, and panela, unless they have labels that clearly state they are made from pasteurized milk.
- Do not eat refrigerated pâtés or meat spreads. Canned or shelf-stable pâtés and meat spreads may be eaten.
- Do not eat refrigerated smoked seafood unless it is contained in a cooked dish, such as a casserole. Refrigerated smoked seafood, such as salmon, trout, whitefish, cod, tuna, or mackerel, is most often labelled as "nova-style," "lox," "kippered,"

Further Researach

Information on food irradiation is available from the Canadian Food Inspection Agency at www. inspection.gc.ca/ english/fssa/concen/ tipcon/irrade.shtml.

"smoked," or "jerky." The fish is found in the refrigerator section or sold at deli counters of grocery stores and delicatessens. Canned or shelf-stable smoked seafood may be eaten.

Commercial Prevention

Commercial prevention of *Listeria* contamination relies on extreme cleanliness during the processing of food products. As the Maple Leaf Foods case has demonstrated, however, *Listeria* can sneak in to almost any food processing plant.

There are two prevention methods used in some plants in the United States that have yet to find favour in Canada. The first of these is pasteurization of processed products such as deli meats after they leave the production line. While effective, the process tends to leach water from the meats, making the packages less attractive than similar unpasteurized products.

The second process is irradiation, in which certain foods are exposed to ionizing radiation from gamma rays or other sources. This process is extremely effective in killing bacteria such as *Listeria*. At present, only a limited number of foods may be irradiated under Canadian law. Health Canada has proposed a major expansion of this list of foods to include meats and fish.

Treating Listeriosis

Listeriosis, like other bacterial infections, is treated with antibiotics. These can be very effective, especially if given early enough. Given to pregnant women soon after the infection develops, antibiotics will often prevent the development of the infection in the fetus.

In the elderly, however, even prompt treatment with antibiotics may be ineffective. The recent outbreak in Canada resulted in the death of 20 elderly patients.

Follow-up Activity Does your family follow the list of recommendations from the Canadian Food

Inspection Agency? Review the list with other members of your family to determine if there are any ways to make food handling safer at your home.

DEADLY BACTERIA STRIKE CANADIANS Activity: The Maple Leaf Response

The CEO of Maple Leaf Foods, Michael McCain, was widely praised in the media for his response to the listeriosis outbreak in Canada. In essence, McCain assumed full responsibility in his company's name for the outbreak and apologized without reservation to the Canadian public.

Maple Leaf Foods placed print advertisements in magazines across the country. These are available on the Maple Leaf Web site at www.mapleleafaction. com/print_advertisements_en.html. Michael McCain also appeared in television advertisements that were made available on YouTube as well as Canadian television channels. These may be viewed at www.mapleleafaction.com/tv_advertisements en.html.

Using the materials identified above, write a brief (one page) article analyzing the Maple Leaf Foods response to the recent crisis:

- Does the company seem to truly regret its role in the crisis?
- Did it respond rapidly and responsibly to the crisis?
- Is it taking appropriate steps to avoid similar problems in the future?
- Are its open letters and TV advertisements effective in communicating with the general public?
- Are the open letters and TV advertisements likely to reduce public concerns about the company's products?

Finally, do you believe that the actions taken by Maple Leaf Foods will be instrumental in restoring the company's reputation as one of Canada's finest food processors? Are there other steps you would recommend that the company take in order to regain its former market share in the food industry?