

Consumer Food Trends

Defining Opportunities
for Alberta's Agri-food Industry

Consumer Trends In Food Safety

Economics & Competitiveness



CONSUMER TRENDS
IN
FOOD SAFETY

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Abstract

Food safety has been a growing consumer concern over the last ten years. As an industry, is there more that we can do to meet our consumers' needs regarding food safety? "Yes" may seem like the obvious answer, but you also may be thinking, meeting their needs would be easier if I knew what they were really concerned about. This article will answer that question and other questions that you might have such as

- Where do consumers think the greatest chance of food safety problems can develop?
- Who do they think is responsible for providing them with safe food?
- Where do they get their food safety information?
- What actions can a food processor take to address consumers' needs?

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Consumer Trends in Food Safety

Background

Food safety has been a growing consumer concern over the last ten years. As an industry, is there more that we can do to meet our consumers' needs regarding food safety? "Yes" may seem like the obvious answer, but you also may be thinking, meeting their needs would be easier if I knew what they were really concerned about. This article will answer that question and other questions that you might have such as

- Where do consumers think the greatest chance of food safety problems can develop?
- Who do they think is responsible for providing them with safe food?
- Where do they get their food safety information?
- What actions can a food processor take to address consumers' needs?

Safe food, from farm to fork, is delivered daily to consumers. The concept seems simple, right? Safe raw food product is the input into processing; the processors' output is a safe processed product that ends up as safe food in grocery stores, restaurants and food service, and on Albertan's tables. This concept is easy to discuss. However, as a stakeholder in the farm to food chain, you know there are a number of variables and many players at each link in the chain that can affect the safety of the food. Food safety is a responsibility that is shared by producers, processors, distributors, retailers, and consumers.

As indicated by numerous Canadian polls, consumers are concerned about food safety and consider safe food to be an important food quality (Enviroics, 1999; Ispos Reid, 2001a). Research (Enviroics, 1999; McCann 2002; Ispos Reid, in Karman 2003) shows Canadians are specifically concerned about the following food safety issues:

- farming practices - antibiotic and growth hormone use in livestock; pesticide residues in crops
- bacteria contamination
- food additives and preservatives
- perishable/freshness concerns
- problems arising from poor food handling/improper preparation
- animal disease

Research specific to Albertans had similar findings to the Canadian research (see Table 1). Consumers were asked, "When you think of food safety issues – that is, production, handling, and storage of foods – which one do you consider to be the most important?" and, "What other food safety issues are important to you?" (Compas Research, 2003, p.25). Overwhelmingly, 44 per cent of Alberta consumers identified safe food handling as the number one concern (Compas Research, 2003). This was followed by cleanliness (17 per cent), proper storage (13 per cent), production (8 per cent), and freshness (3 per cent).

Table 1.
Food Safety Concerns of Alberta Consumers

Issue	Percent of Responses
Safe Food Handling	44
Cleanliness	17
Proper Storage of Food	13
Production	8
Freshness	3

Research suggests that Canadians have a disconnection between their awareness about, and the importance of, food safety issues. Consumers were asked, “How much have you heard, either through word of mouth or through the media, about the following food-related subjects?” (Compas Research, 2003, p. 27). Most Canadians replied they were aware of Escherichia coli, proper cooking and cooling instructions, contamination, and safe food handling. However, depending on the specific food-related subject, between 13 and 23 percent of respondents indicated they had either not heard anything or much about these subjects. These findings suggest that although more work can be done to inform them, consumers also need to take some responsibility to seek information about, and to practice safe food handling¹, preparation² and storage³ in the home.

The concerns identified by consumers – proper storage, cleanliness, bacteria contamination, perishability and freshness, poor food handling, and improper preparation can be causes of food borne illnesses.

Foodborne Illness

Foodborne illness (food poisoning) occurs when a person gets sick by eating food (or drinking a beverage) that has been contaminated with an unwanted microorganism or pathogen. Bacteria, parasites, and viruses are microorganisms that can cause foodborne illness. Some of the most common pathogens causing foodborne illnesses are Clostridium botulinum, Clostridium perfringens, Campylobacter, Cyclospora, Escherichia coli 0157:H7, Salmonella, and Toxoplasma (Canadian Food Inspection Agency Fact Sheet, 2003). Listeria monocytogenes is a bacterium that can also cause foodborne illness.

Health Canada estimates that every year approximately two million Canadians suffer from illnesses caused by foodborne bacteria and about 30 die (Canadian Partnership for Foodborne Illness, 2003). Health Canada also estimates that the annual cost related to these illnesses and deaths exceeds \$1 billion (Canadian Partnership for Consumer Food Safety Education, 2003).

Safe food practices to minimize the risk of contamination are employed throughout the food chain starting at the farm level (with on-farm food safety programs) through to the processing level (with programs like Hazard Analysis Critical Control Point - HACCP). Food safety process control systems address three types of hazards (chemical, physical and biological) in their preventative approach to food safety practices. Although these safeguards are in place, bacteria can survive the processing stage and foods may become

contaminated during preparation, cooking, and storage in the home. Educating consumers to practice safe food handling, storage, and preparation techniques at home can effectively reduce the number of food borne illnesses.

The Canadian Partnership for Consumer Food Safety Education (www.canfightbac.org) is a partnership between industry, health, environmental and consumer organizations, and federal and provincial government agencies. Its mandate is to "contribute to the reduction of microbial foodborne illness in Canada by increasing awareness of safe food handling practices through the coordination and delivery of food safety education programs focused on the consumer" (Health Canada, 2003). Through the FightBAC!TM campaign, the Partnership promotes four key messages:

- CLEAN: wash hands and surfaces often
- COOK: cook to proper temperatures
- SEPARATE: don't cross contaminate, and
- CHILL: refrigerate promptly.

Responsibility for Food Safety

Recent consumer research suggests that Canadians (41 per cent of survey respondents) think that of the five stages in the food supply chain – farm, processor, retail (grocery stores), in the home, or in restaurants/food service – the most likely place for developing a food safety problem is during processing (Ispos Reid, 2001a).

Another consumer study found most respondents indicated that food processors and manufacturers play a very important role in food safety (Compas, 2003). In the same poll, respondents indicated that farmers, food distributors, retailers, restaurants, and the provincial government also play an important role. At the food processing level, consumers felt that poor handling/preparation, bacterial contamination, and lack of surveillance/safety measures are the primary risks (Table 1) (Ispos Reid in Karman, 2003).

Shared Responsibility for Safety

Although consumers may indicate in opinion polls that a food safety problem is likely to occur at the processing level, food safety needs to be a shared responsibility between government, food processors, retailers, distributors, and consumers. Through education campaigns like FightBAC!TM, consumers will become more aware of the role they play in ensuring safe food.

Table 2.
Food Safety Risks Perceived by Consumers at Various Stages in the Food Supply Chain

Stage in the Food Supply Chain	Risk
Farm	Pesticide use
Food Processing	Poor handling/preparation Bacteria contamination Lack of surveillance/safety measures
Grocer/Retailer	Poor handling/preparation Shelf life Poor storage and refrigeration
Restaurants	Poor handling/preparation Bacteria contamination
Home	Poor handling/preparation Bacteria contamination Poor storage and refrigeration

Source: Ipsos Reid in Karman, 2003

Not All Consumers Are Created Equally

Personal and household characteristics influence consumers' perceptions of food safety issues. Studies show that men, consumers with no children, younger consumers, and those with some college education are less concerned about food safety than other demographic groups (USDA, 2003; Lin, 1995). Consequently, these consumers may require higher exposure than other types of consumers to food safety messages to change attitudes and behavior.

Sources of Food Safety Information

Knowing how consumers access food safety information, food processors can determine effective ways to increase awareness about safe food handling and preparation regarding both branded and generic products. While consumers receive food safety information from a variety of sources, their main source of information is mass media: newspapers, magazines, radio, and television (McCann, 2002; Compas, 2003). The media usually provide general food safety information. If your product is not familiar to consumers, you may consider providing specific information on your package label, flyers, or point-of-sale post cards.

The Food Safety Information Society: An Important Source of Information

The Food Safety Information Society operates a national, toll-free food safety hotline (1-800-892-8333). The hotline received about 3, 200 phone calls in 2003. Most queries are about food handling/preparation⁴ and food storage⁵ (see Fig.1). Examples of these queries are “How can I tell when this product is cooked?” and “How do I thaw this product properly?” The common queries about food storage are

- How long can I keep this product?
- Where can I safely store this product?

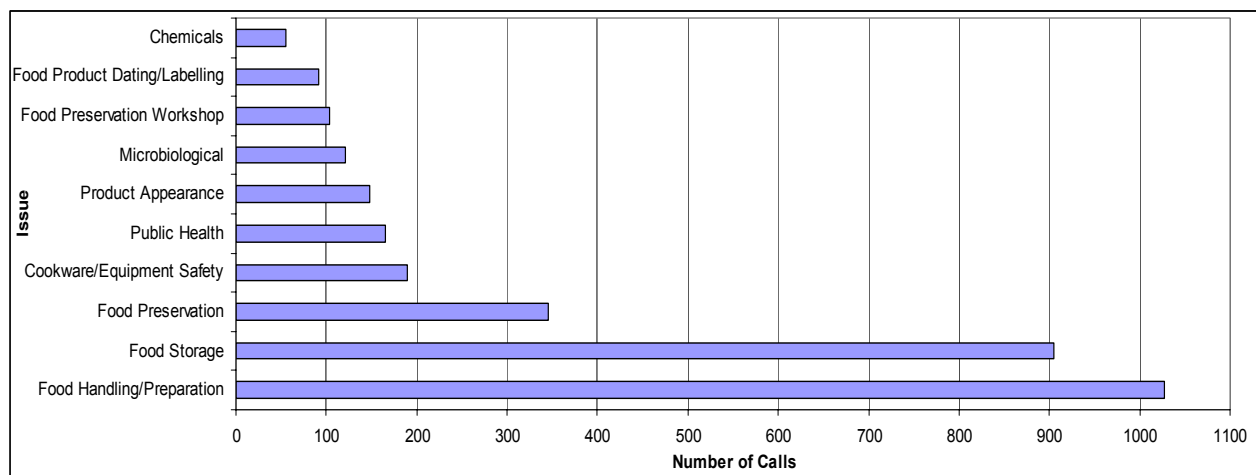


Fig. 1. Number of Calls by Issue to the Food Safety Information Society in 2003

The Society also prepares educational fact sheets and brochures in response to consumer concerns. These fact sheets and a food safety brochure are available by phoning them or visiting their website at <http://www.foodsafetyline.org>.

Recommendations

Just as consumers' concerns about food safety will continue, so must the partnership between producers, processors, distributors, retailers, and consumers to address these concerns. As a food processor, what can you do to address some of these concerns?

Studies indicated consumers feel that a food safety problem is most like to occur during processing. As a processor, you can ensure that this will not be the case for your operation by implementing an effective HACCP plan. HACCP is internationally recognized as an effective approach to food safety. Prudent processors consider food safety as the first quality measure in all of their products. Having a properly designed and implemented HACCP system demonstrates due diligence by the food manufacturer.

Currently, in Canada, federally inspected fish processing facilities have a mandatory food safety program. The amendments to the Meat Inspection Regulation will likely be finalized later this year and HACCP will be mandatory in federally registered meat and poultry facilities. More information about HACCP is available on the Alberta Agriculture, Food and Rural Development (AAFRD) website at <http://www1.agric.gov.ab.ca/app21/rtw/index.jsp>. The Food Safety Division of AAFRD also has four food safety system specialists that can assist processors. They can be reached at (780) 427-7535.

Food processors are encouraged to provide consumers with relevant safe handling and storage information for their particular products through package labeling or brochures and postcards at point-of-purchase locations. By providing information such as proper handling and storage of the product, processors are meeting the information needs of consumers and providing safety assurance in their product. Remember, not all consumers

are created equally, so you need to know your consumers to determine how you can effectively get this information to them.

Overwhelmingly, Canadians identified that most of the food safety information they receive comes from the media. The agri-food industry, including government, needs to be very diligent in ensuring that accurate food safety information is conveyed in the media. Industry and government should consider using the media - newspapers, magazines, radio, and television – as the primary medium to get food safety information to Canadians.

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¹ Food handling is a broad term that applies to how food is handled in the grocery store until consumption. For example, food handling information includes the length of time food can safely be left in vehicle after grocery shopping and the length of time food can be left unrefrigerated.

² Food preparation is more specific than food handling and includes how to get the food ready to be cooked or eaten. This includes cutting, chopping, washing, basting, marinating and cooking the food to the proper temperature.

³ Food storage includes information on where foods can be safely stored, how long they can be safely stored, and the proper storage temperature.