

## Chapter 1

# FOOD SAFETY SYSTEMS

### 1.0 FOOD SAFETY SYSTEMS

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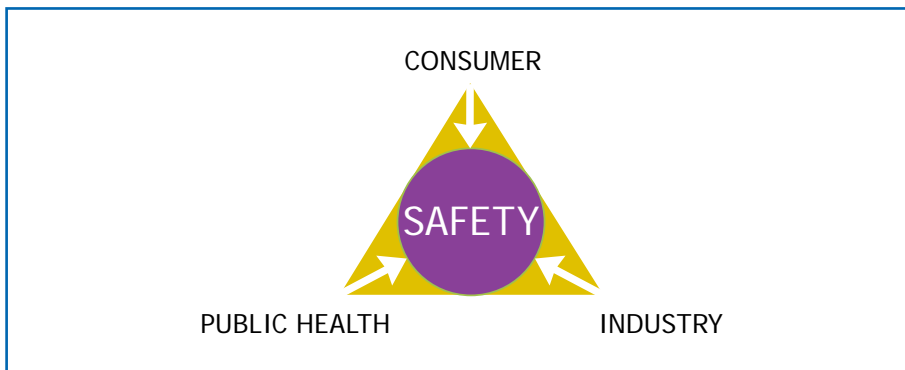
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## 1.0 FOOD SAFETY SYSTEMS

The need for food safety is driven by consumers, the food industry and public health agencies. Food processors have an obligation to ensure they produce the safest food possible.



Mishandling and/or misuse can make even the safest ingredients unsafe. To produce safe food, processors must follow specific steps and procedures throughout the entire production process.

Safe food usually becomes unsafe by accident. This is important to keep in mind even if the facility has never been involved in a food safety issue or recall.

Many people become sick or injured from unsafe food each year. A food safety incident connected to the facility could cause significant costs through recalls, negative publicity, loss of customers, loss of credibility and lawsuits.

### 1.1 Parts of a Food Safety System

In the past, three types of food safety measures were used:

- Activities required by regulation. Regulatory requirements are the basic minimum legal requirements that all food processors must follow.
- Activities stated in the codes of Good Manufacturing Practices (GMP) or Good Hygienic Practices (GHP). These activities relate to processing, transportation, etc.
- Activities performed to verify the food's safety after it is produced (e.g. end product testing).

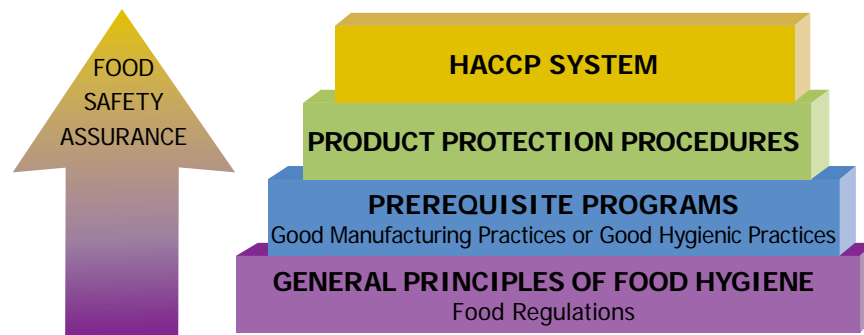
*Food safety is driven by consumers, industry and public health.*

*The best way to ensure that the food you produce is safe is to develop a food safety system.*

*Food regulations are the foundation of all food safety systems.*

As seen in Figure 1, food regulations are the foundation for a successful food safety system. These regulations are further enhanced by GMP or GHP, but these practices alone are not enough. These measures rely on a snapshot inspection of the processing facility and not ongoing activities.

Figure 1



In order to increase food safety assurance, a facility's GMP or GHP programs need to be further supported. This is to ensure that all potential hazards to the food and production process are identified and controlled.

End product testing may provide some added assurances to consumers but can be costly and time consuming. End product testing has also been proven to be less reliable than a well implemented, documented and maintained food safety system. Today's approach to food safety combines compliance with a number of approaches including food safety regulations, GMP, GHP, and the use of an appropriate HACCP system.

Developing a successful food safety system requires a solid understanding of:

- Food safety principles;
- Hazards associated with the facility's products;
- The steps required to prevent those hazards;
- Regulatory requirements for the product; and
- What makes a food safety system auditable and verifiable.

A facility is responsible for knowing all necessary regulations and laws as they relate to the company's product or process. These requirements may include but are not limited to:

Alberta Food Regulation

<http://www.canlii.org/ab/laws/regu/2006r.31/20061113/whole.html>

Alberta Food and Retail Services Code

<http://www.health.gov.ab.ca/professionals/foodcode.html>

Food and Drug Act and Regulations

<http://laws.justice.gc.ca/en/F-27/C.R.C.-c.870/index.html>

Consumer Packaging and Labeling Act

<http://laws.justice.gc.ca/en/C-38/C.R.C.-c.417/index.html>

Commodity Specific Acts and Regulations

<http://www.inspection.gc.ca/english/reg/rege.shtml>

A facility's food safety system must meet all regulatory and legislative requirements, and also be auditable.



*Alberta Agriculture and Food has a list of Alberta food safety consultants. For contact information, visit [www.agric.gov.ab.ca/app68/agriprocessors?cat1=Consultants](http://www.agric.gov.ab.ca/app68/agriprocessors?cat1=Consultants).*

## 2.0 HACCP

HACCP is internationally accepted as one of the most effective approaches to safe food production. HACCP (pronounced HAS-sip) stands for Hazard Analysis Critical Control Point. It is a proactive and prevention based system.

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HACCP helps facilities take food safety to the next level. It complements regulatory compliance and GMP, and provides additional assurances. Rather than relying on end product testing to detect failures, HACCP applies control measures at identified stages of the production process. This serves to prevent, reduce or eliminate hazards before they occur. When well implemented, HACCP will meet the requirements of an effective food safety system.



*Chapter 2: HACCP Systems Explained provides an overview of HACCP and its processes. It explains the basic provisions needed to ensure an effective and successful HACCP plan.*

A HACCP system includes both prerequisite, or underlying programs and also HACCP plans. Prerequisite programs are the foundation of a HACCP system and include the procedures and practices that provide the basic environmental and operational conditions needed to produce safe foods. Once a facility documents and implements these environmental controls, it can begin the development of HACCP plans.

HACCP plans outline how the hazards associated with incoming materials (ingredients) and process steps are controlled. They also identify the processes that are critical to ensuring food safety (e.g. the critical control points).

*Prerequisite programs + HACCP plans = HACCP system.*



A facility must develop, implement and maintain both prerequisite programs and HACCP plans when implementing an effective HACCP system.

## 3.0 THE AHA!

The Alberta HACCP Advantage (AHA!) is a program developed by Alberta Agriculture and Food in cooperation with Agriculture and Agri-Food Canada (AAFC). It recognizes the HACCP systems that food processors in Alberta have developed and are using.

The AHA! program includes:

- The AHA! Standard - a comprehensive food safety standard;
- The AHA! Guidebook - a comprehensive food safety manual; and
- HACCP system certification and Alberta government recognition.



Check out the AHA! website at <http://www.agric.gov.ab.ca/aha>

### 3.1 The AHA! Standard

The AHA! Standard follows national guidelines. It's part of a Canada-wide initiative focusing on food safety.

The AHA! Standard has three parts:

- Part I – eight prerequisite programs (often referred to as Good Manufacturing Practices or GMPs) and a product protection section;
- Part II – seven HACCP plan forms; and
- Part III – overview of the requirements for certification and recognition.

The AHA! Standard can be used to develop a complete HACCP system for a facility's operation. Certain components of it can also be used to improve a facility's current food safety system.

*Alberta Agriculture and Food has a team of experienced food safety specialists. They are available, free of charge, to assist in assessing the needs of a facility's food safety system. Call (780) 427-4054.*

*Contact the Alberta Agriculture and Food Food Safety Division to learn more about adapting the AHA! Standard to help meet food safety goals.*

## 4.0 HACCP RECOGNITION IN CANADA

In Canada, the Canadian Food Inspection Agency (CFIA) oversees recognition of HACCP systems in Alberta's federally registered facilities. The CFIA has developed two HACCP standards: the Food Safety Enhancement Program (FSEP) for meat processing and dairy facilities, and the Quality Management Program Standard (QMP) for fish plants.

Non-federally registered food processing facilities and provincially registered facilities may be audited for HACCP systems. However, these systems are not recognized by CFIA.

Some provinces have initiated programs where they will recognize a HACCP system that has been audited by a third-party certification body.

Like FSEP, the AHA! Standard meets the HACCP requirements of the Codex (food safety recommendations made by the United Nations Food and Agricultural Organization and the World Health Organization). However, the AHA! Standard has introduced two additional programs to provide further food safety assurances. They are Supplier Quality Assurance and Allergen Control.

Supplier Quality Assurance ensures the safety and quality of the incoming ingredients and materials. This provides a greater assurance of the safety and quality of the end product.

Allergen Control ensures that systems are in place to identify and control potential allergens or ingredients not declared in the food product.

For the facility's HACCP system to be certified and recognized by the Government of Alberta under the AHA!, it must:

- Implement the AHA! Standard;
- Complete a successful HACCP system audit; and
- Become certified by an independent body.

With the introduction of the AHA! Standard, food processing facilities in Alberta can formally adopt a program that the Government of Alberta will recognize.



*For more information on the recognition of AHA! systems, see Chapter 16: Understanding the AHA! Recognition Protocol.*

*Non-federally registered food processing facilities in Alberta cannot receive CFIA recognition for their HACCP systems.*

*The AHA! program enables the Government of Alberta to recognize HACCP systems at food processing facilities in Alberta.*

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6. NSW Food Authority (2005) *Industry Guide to Developing a Food Safety Program (Hospitals and Aged Care)*.