Chapter 1
FOOD SAFETY SYSTEMS

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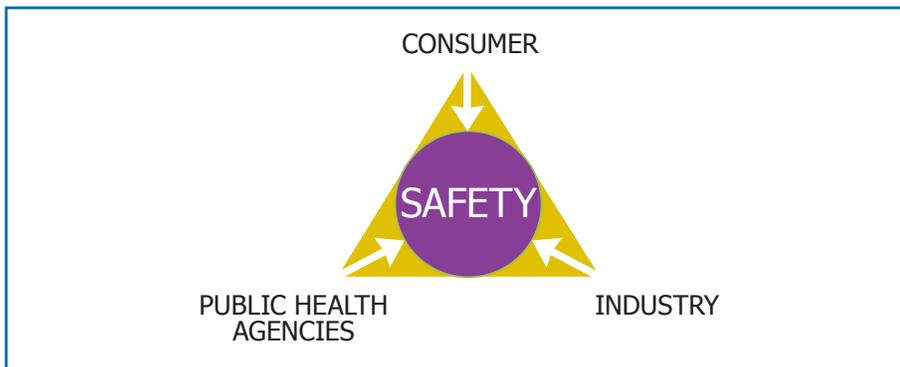
The need for food safety is driven by consumers, the food industry and public health agencies. Food processors have an obligation to ensure they produce the safest food possible.

CONSUMER

SAFETY

PUBLIC HEALTH AGENCIES

INDUSTRY

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).

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 Rural Development has a list of Alberta food safety consultants. For contact information, visit http://www.agric.gov.av.ca/app68/agriprocessors?cat1= Consultants#30829*

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.

HACCP complements regulatory compliance and GMP.

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.

Prerequisite Programs – the foundation of the system.	**+**	HACCP Plans – identify the hazards and processes that are critical to ensuring food safety	**=**	HACCP System – a comprehensive and effective food safety system.

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

3.0 SOURCES OF INFORMATION:

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