What Is HACCP?

The hazard analysis critical control point (HACCP) system is a food safety program that identifies and controls the critical steps in a food processing operation.

HACCP’s objective is to eliminate all hazardous practices/situations that could result in the microbiological or chemical contamination of food products.

What Hazards Exist In A Dairy Plant?

Dairy products can be contaminated before, during and after processing. For instance, improper refrigeration of raw milk can lead to the development of heat resistant toxins. Product ingredients, if improperly stored/handled, could contain chemical or other incidental contaminants. Poorly designed and maintained equipment may result in pathogen survival; and unsanitary facilities and poor work habits could re-contaminate dairy products after processing.

A Disaster Will Never Occur In My Plant!

Unfortunately case histories tell a different story. There have been several reported and unreported dairy product recalls and food poisoning incidents during the past decade that a well designed HACCP program could have prevented.

The following are some examples:

- A cross-connection led to more than 16,000 confirmed ill, and five (5) deaths, from Salmonella poisoning.
- Improper installation and operation of an HTST pasteurizer caused more than 1500 people to become ill from Salmonella poisoning.
- Improperly cleaned containers led to several thousand people becoming ill from Yersinia poisoning.
- Peanuts were mistakenly substituted for almonds in ice cream and led to a severe allergic reaction in at least one individual.
- The contamination of ice cream sandwich cookies with a diesel-like substance resulted in a number of consumers suffering gastrointestinal illness.
- Improper refrigeration of raw milk caused more than 860 people to be poisoned by Staphylococcus aureus toxin.
- Fluid milk was recalled because it was contaminated with a soap solution.
- Milk cartons were used to contain wash water and were mistakenly distributed to retail outlets. A recall was initiated.
- A cracked raw milk tank was used to store pasteurized milk resulting in serious quality problems and suspected food poisonings.

How Do I Control These Hazards?

The HACCP concept involves seven (7) basic principles which, when applied, significantly reduce the risk of contamination. These principles are:

- assess hazards that may be present in the food production system.
- determine the critical points required to control the identified hazards.
- establish controls that must be met at each critical point.
- follow established monitoring procedures.
- use corrective procedures if a deviation is found at a critical control point.
- establish a record-keeping system, and
- verify that the system is working properly.
What is the cost?

Most critical control points in a dairy plant are currently being monitored. Many plants need only reorganize their record keeping system to facilitate the HACCP concept. As such, the cost of an HACCP program is very small when compared to the alternative cost of recalls, lawsuits and/or plant closures.

How do I start?

A major advantage of HACCP programs are their design flexibility. Individual HACCP systems are based on the characteristics of each dairy plant. Hence, while they may appear similar, there is not a standard procedure for all dairy plants. Each plant must therefore apply the seven (7) general principles to address the needs of their specific receiving, processing and storage facilities.

For further information contact the Dairy Plant Specialist at Food Protection Services

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