ABSTRACT

By Application of HACCP food manufactures can assure safety of their products to the consumers. HACCP system as it applies to food safety management use the approach of controlling critical control points in food handling to prevent food safety problems. The system, which is science, based and systematic, identifies specific hazards and measures for their control.

The study was carried out to identify the critical control points and establish a HACCP system for the ice cream manufacturing process of ice cream factory of Ceylon Cold Stores Ltd. It was conducted following the systematic methods specified in HACCP system. It contained hazard analysis, determination of critical control points, determination of critical limits, establishment of monitoring and verification procedures and record keeping.

All hazards associated with the ingredients and the process steps were identified. Critical Control Points for preventive measures were identified. The measures used to control hazards carried out with the ingredients, which are added after pasteurization, were found as critical control points. The process steps mix filtration, pasteurization, aging, freezing and finished product storage was found to be the critical control points.

Supplier Quality Assurance (SQA) was the main element of controlling hazards, which are associated with raw materials, which are not subjected to treatments against these hazards during the manufacturing process of the factory.

Filters intact for mix filtration, 79°C for 25 seconds, for pasteurization, 7°C within 90 min for cooling, 7°C for temperature of Aging, and 72 hrs maximum for Aging were established as critical limits of the manufacturing process. Introduction of air filtration to ice cream freezers was suggested as a process modification to be made.