# HAZARD ANALYSIS AND CRITICAL CONTROL POINTS

HACCP is a systematic approach to identifying and controlling hazards (i.e. microbiological, chemical or physical) that could pose a danger to the preparation of safe food and It has been a legal requirement for all food businesses to have a food safety management system based on the principles of HACCP.

Before implementing HACCP, food businesses must already be operating to standards of good hygiene practice by having in place relevant pre-requisites, which include, where appropriate. Premises and structure; plant and equipment; maintenance; services (water, ice, steam, etc.); storage, distribution and transport; cleaning and sanitation; waste management; pest control; personnel hygiene and training;

Once the prerequisites are in place you can begin to build HACCP on top of these by assembling HACCP team which has basic understanding of HACCP, describing your product(s) and the intended use by consumers and then depending on the size of the business draw up a flow diagram to show each step of your operation.

# NOW YOU ARE READY TO APPLY THE PRINCIPLES OF HACCP.

#### **1** PRINCIPLE: IDENTIFY AND ANALYZE HAZARDS ASSOCIATED WITH THE FOOD

Hazards could be biological (e.g., foodborne bacterial pathogens), chemical (e.g., toxins, allergens) or physical (e.g., metal fragments, broken glass).

### **PRINCIPLE: IDENTIFY THE CRITICAL CONTROL POINTS (CCPS)**

A Critical Control Point (CCP) is a step in food processing where a control procedure must be applied to prevent a food safety hazard occurring or reduce it to a safe level. It is the last chance to control a hazard before the food is sold.

#### **RINCIPLE: ESTABLISH CRITICAL LIMITS FOR EACH CCP**

A critical limit is the criterion that should be met to ensure food safety in a product (e.g., minimum cooking temperature and time to ensure elimination of harmful bacteria). Set limits to enable you to identify when a CCP is out of control.

#### **PRINCIPLE: ESTABLISH A MONITORING PROCEDURE TO ENSURE EACH CCP STAYS WITHIN ITS CRITICAL LIMITS**

When CCPs and critical limits have been identified it is important to have a way to monitor and record what is happening at each CCP. Typically, monitoring will involve measuring parameters such as temperature and time. However, how you monitor and how often will depend on the size and nature of your business. Monitoring should in all cases be simple, clear and easy to use.

## ESTABLISH CORRECTIVE ACTIONS IF THE CCP IS NOT WITHIN THE ESTABLISHED LIMITS

By applying corrective actions, the control of hazards is regained (e.g., reprocessing or disposing of food if the minimum cooking time and temperature are not met). When monitoring indicates that a CCP is not under control, corrective action must be taken.

# **6** ESTABLISH VERIFICATION PROCEDURES TO CONFIRM THAT THE HACCP PLAN IS OPERATING EFFECTIVELY AND ACCORDING TO WRITTEN PROCEDURES

This verification may include reviewing HACCP plans, CCP records, microbial sampling (e.g., verify that time and temperature recording devices are calibrated and working properly).

#### **7** ESTABLISH RECORD-KEEPING AND DOCUMENTATION PROCEDURES

For the successful implementation of HACCP, appropriate documentation and records must be kept and be readily available. This includes monitoring documentation, actions taken to correct a potential problem, validation documents, etc.



This publication was funded by the European Union. Its contents are the sole responsibility of the NSF Euro Consultants Consortium and do not necessarily reflect the views of the European Union.

