

HACCP

A FOOD SAFETY MANAGEMENT SYSTEM

Catering



An Introduction to Hazard Analysis and Critical Control Point (HACCP) for Food Catering Businesses

A Food Safety Management System

1. Introduction

Hazard Analysis and Critical Control Point (HACCP) is a systematic approach to identifying and controlling hazards (i.e. microbiological, chemical or physical) that could pose a threat to the preparation of safe food. HACCP involves:

- identifying what can go wrong
- planning to prevent it
- making sure you are doing it.

In simple terms, it involves controlling ingredients and supplies coming into a catering business and what is done with them thereafter.



2. Scope

Businesses that are considered to be within the scope of this document will collectively be referred to as catering businesses and include such premises as hotels, restaurants, public houses, take-aways, sandwich bars, delicatessens, coffee shops, street vendors, mobile shops, vending machines, outside catering companies, hospitals and other institution catering operations.

3. Purpose

This document is not a HACCP system. It is a guide for catering businesses to assist in the development and implementation of their own HACCP only after appropriate prerequisites are in place (see Section 5). The nature and the complexity of each individual

HACCP will, in practice, depend on the nature and complexity of the specific catering business.

Users of this document may also consult the National Standards Authority of Ireland (NSAI) standard I.S. 22000:2005, an international standard which outlines a food safety management system based on the principles of HACCP.



4. Legal Obligations

Since 1998 it has been a legal requirement for all catering businesses to have a food safety management system based on the principles of HACCP. Regulation (EC) No. 853/2004 on the hygiene of foodstuffs outlines what is required by catering businesses in terms of food safety management based on the principles of HACCP. The proprietor of a catering business has a legal obligation to understand what this Regulation demands and be able to explain how it has been applied in the catering business.

Environmental health officers (EHOs) currently assess catering businesses for compliance with the legislation. It is the responsibility of the catering business, not the EHO or other regulatory authorities, to develop and implement a food safety management system based on the principles of HACCP.

Food safety training is essential to all catering businesses in ensuring the preparation and service of safe food. It is a legal requirement that employees involved in a catering business are adequately trained and/or supervised commensurate with their work activity. The responsibility for training and supervision of employees (full-time, part-time or casual) lies solely with the proprietor of a catering business. See Food Safety Authority of Ireland (FSAI) publications, Guide to Food Safety Training for further information.

Where a HACCP system has been devised by an external consultant it is essential that there is appropriate ownership of the system by the catering business itself. Proprietors using external consultants should ensure they know how the HACCP system works and how it is being applied

to their business and that their employees are suitably trained to ensure effective implementation. See FSAI publication Choosing an External HACCP Consultant for further information.

It is unrealistic to operate HACCP or to demonstrate compliance with the current legislation without providing evidence such as written records. As with HACCP itself, the complexity of the record keeping will very much depend on the nature and complexity of the business. The aim should be to ensure control is maintained without generating excessive paperwork.



5. Prerequisites (Prerequisite Hygiene Requirements)

Before implementing HACCP, basic food hygiene conditions and practices called prerequisites must be in place in a food catering business. HACCP will then be used to control steps in the business which are critical in ensuring the preparation of safe food.

Prerequisites include where appropriate:

1. Cleaning and Sanitation
2. Maintenance
3. Personnel Hygiene
4. Pest Control
5. Plant and Equipment
6. Premises and Structure
7. Services (compressed air, ice, steam, ventilation, water etc.)
8. Storage, Distribution and Transport
9. Waste Management
10. Zoning (physical separation of activities to prevent potential food contamination)

Catering businesses should refer to NSAI standard I.S. 340:2007, for further details on prerequisite requirements. See also FSAI Guidance Note 10 - Product Recall and Traceability for information on how to set up traceability and recall systems to ensure that, in the event of a food incident, unsafe food does not reach the consumer.

6. HACCP

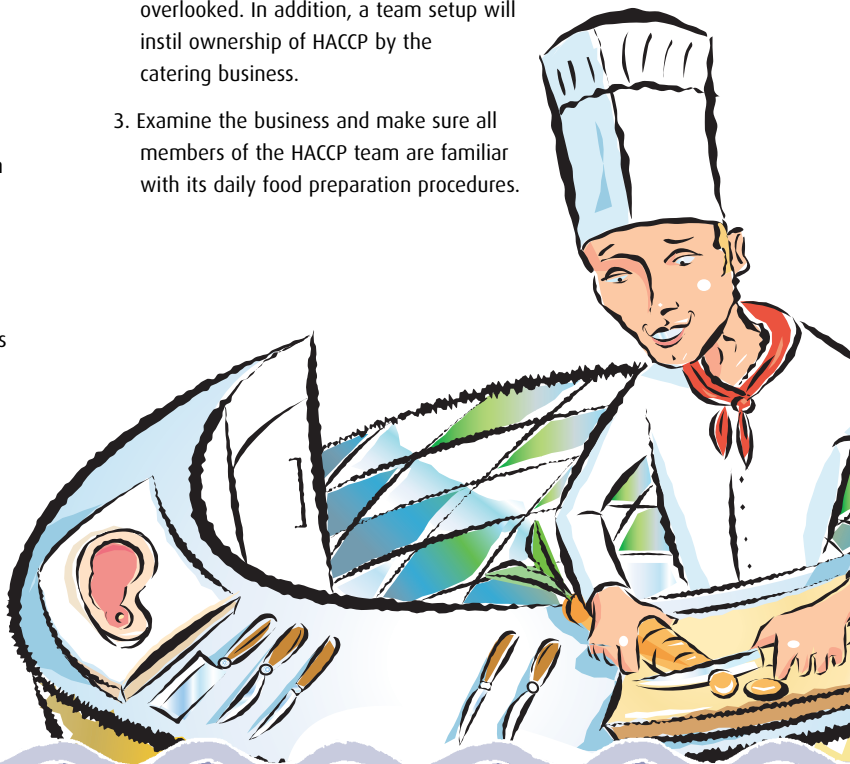
HACCP uses an approach to food safety which concentrates a caterer's attention on the causes of food safety hazards. This allows a caterer to identify and control food safety hazards. The development and implementation of HACCP involves following a series of logical steps as outlined in Sections 6.1 to 6.8.

6.1 Pre-Planning and Organisation

1. It is accepted that some catering businesses will not have the skills or knowledge necessary to develop and implement HACCP. Therefore the proprietor of a catering business must ensure staff are trained in the concepts of HACCP and provided with appropriate HACCP information.

Some businesses use external consultants to assist with HACCP design and implementation. See FSAI publication Choosing an External HACCP Consultant for further information.

2. Depending on the size of the business, assemble staff into a small team, with a team leader to lead in designing and implementing HACCP. Use experienced members of your staff. In a small business, of course, it may be that there is only one staff member available to design and implement the HACCP system. The advantage of a team is that members tend to have in-depth knowledge of all aspects of the operation which reduces the risk of details being overlooked. In addition, a team setup will instil ownership of HACCP by the catering business.
3. Examine the business and make sure all members of the HACCP team are familiar with its daily food preparation procedures.



6.2 Describing Your Foods

Look at all the foods that the catering business prepares. Write down a description of each food. In so doing you will be able to collect information which will be useful in identifying hazards and determining controls later. Information which can be collected which is useful will include:

1. A list of all ingredients used in the preparation of foods
2. A list of all food storage conditions
3. The sequence of steps in the preparation of a food.

6.3 Identifying Hazards

For many, identification of hazards can be the most daunting part of developing a HACCP plan. Hazards may be:

- biological - e.g. *Salmonella* in a cooked chicken product due to cross contamination with raw meat
- chemical - e.g. contamination of uncovered food with detergent while cleaning
- physical - e.g. a piece of broken glass falling into uncovered food.

Flow-diagrams can be used to describe the sequence of events in the food business from purchase to service/sale. By carefully working through each step in a flow-diagram you should be able to identify all the potential hazards in the business. An example of a simple flow-diagram is given in Annex 1.

Once hazards have been identified you must ensure that they are adequately controlled. In general you will find that the majority of hazards are controlled by ensuring that you are operating an effective prerequisite programme, i.e. good hygiene practices (see Section 5).



6.4 Identifying and Critical Control Points

In some cases, hazards occur at steps which are identified as Critical Control Points and will require additional attention, e.g. more regular monitoring, to ensure that they are being controlled.

A Critical Control Point (commonly referred to as a CCP) is a point or step in food preparation in which control must be applied to prevent a food safety hazard occurring or reduce it to a safe level. It is generally the last chance to control a hazard before the food is served. Some examples of HACCP CCPs are shown in Annex 2.

6.5 Identifying CCP Critical Limits

When a CCP has been identified it is important to give it a critical limit by which the catering business can decide if a food is safe or not. Typically, critical limits are expressed in terms of parameters such as temperature and time. Examples of some critical limits are given in Annex 2.

6.6 Identifying Monitoring Methods

When CCPs and critical limits have been identified it is important for the food catering business to have a way to monitor and ultimately record what is happening at each CCP during the preparation of a food. 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 catering business. Monitoring should in all cases be simple, clear and easy to do. Examples of some monitoring methods are given in Annex 2.

6.7 Corrective Action

When monitoring of a CCP indicates that the critical limits have not been complied with or adhered to, the catering business must have a procedure on what action should be taken to bring the CCP back within critical limits (i.e. corrective action). All corrective action procedures should be documented and be clear on the requirements for corrective action. Examples of some corrective actions are given in Annex 3. Corrective action procedures should include the following:

1. What to do with the food
2. What to do to bring the process back under control
3. Which member of staff has responsibility for carrying out corrective action.



6.8 Reviewing HACCP

The review, checking and updating of your HACCP is an ongoing and routine procedure which will always be part of any catering businesses HACCP. The purpose of the review is twofold. Firstly, upon implementation of HACCP it should be verified that it is working as intended. On a regular basis a manager or supervisor should confirm that monitoring of CCPs is taking place and that control is being maintained.

Secondly, the review should verify and validate that the HACCP, as designed, will ensure the safety of the food. The hazard analysis, identification of CCP and control procedures should be reviewed on a periodic basis (e.g. annually) and whenever a change occurs in the food business operation e.g. new equipment, which may affect food safety.



7. Further Information

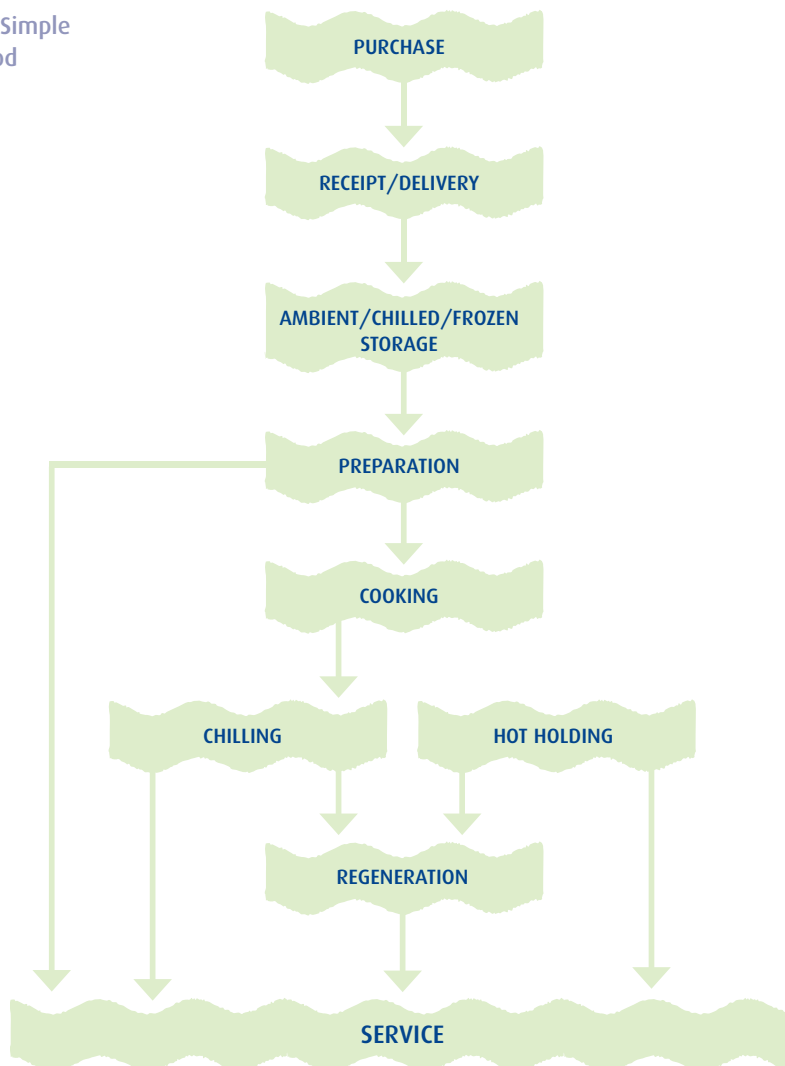
Food Safety Authority of Ireland

- Selecting an External HACCP Consultant
- HACCP Booklets
 - What is HACCP?
 - Terminology Explained
 - How to Select an External Consultant
- Guidance Note No. 10. Product Recall and Traceability
- Guidance Note No. 11. Assessment of HACCP Compliance (Revision 2)
- Guide to Food Safety Training - Level 1: Induction Skills and Level 2: Additional Skills
- Guide to Food Safety Training- Level 3: Food Safety Training Skills for Management.

National Standards Authority of Ireland

- I.S. 340:2007 Hygiene in the Catering Sector
- I.S. 22000:2005 Food Safety Management Systems

Annex 1 Example of a Simple
Flow-Diagram for a Food
Catering Business



Annex 2 Some Suggested HACCP Critical Control Points (CCPs)

Step	Hazards	Control Measure	Critical Control Point	Critical Limits	Monitoring	Corrective Action
Cooking	Survival of pathogenic microorganisms in the food due to inadequate cooking.	Cook food thoroughly.	Yes	Ensure the central part of the food reaches a minimum of 75°C instantaneously or an equivalent time temperature, e.g. $\geq 70^{\circ}\text{C}$ for two minutes.	Probe to check temperature of the food and record.	Continue cooking until correct temperature is reached. Review cooking equipment, procedures and staff training.
Chilling	Growth of pathogenic microorganisms in the food due to inadequate cooking and/or slow chilling.	Chill food rapidly.	Yes	Ensure food is cooled rapidly and placed in a refrigerator within two hours of cooking.	Check food is cool enough to refrigerate and record.	If food is greater than 10°C after 2.5 hours serve immediately or discard. If food is less than 10°C after 2.5 hours, refrigerate. Review chilling equipment, procedures and staff training.



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