



HACCP GUIDE

Master HACCP: Your food safety plan decoded





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What is HACCP?



L'HACCP : définition

HACCP is the acronym for "Hazard Analysis Critical Control Point".

It's a method that guides companies involved in food production or processing to control and manage health risks.

Thanks to its seven principles, the HACCP method ensures active monitoring by identifying stages that may present a danger of contamination.



History of HACCP:
Where does this
method come
from?

1960s - 80s

The HACCP method was created to guarantee the safety of food for astronauts during NASA's space missions.

This preventative system then became widespread in the American industry.

1990s

The concept is officially introduced in the texts of the European Union.

2005

HACCP becomes the international standard.



From now on, any company involved in the production or processing of foodstuffs is required to have and implement an HACCP plan.

What is the purpose of HACCP?



I-E-C Objective

The HACCP method aims to identify, evaluate, and control significant hazards to food safety.

Its use helps to prevent food safety problems rather than reacting after they occur.



Identify



Evaluate



Control

What are the types of hazards?

When we talk about potential hazards in HACCP, this includes 3 types:



Biological hazards

Examples:

- viruses
- bacteria
- etc.



Chemical hazards

Examples :

- pesticides
- additives
- etc.



Physical hazards

Examples :

- wood
- glass
- etc.

Who is concerned by HACCP?

HACCP affects all players in the food chain:



Agricultural producers

They use HACCP to ensure that the products they grow or raise are safe and free from contaminants that could harm consumer health.



Food product manufacturers

They apply HACCP to ensure that their manufacturing process is safe and that their final products are healthy and safe to consume.



Food distributors and retailers

They use HACCP to ensure that the products they sell are safe and have been handled hygienically throughout the supply chain.



Food service providers

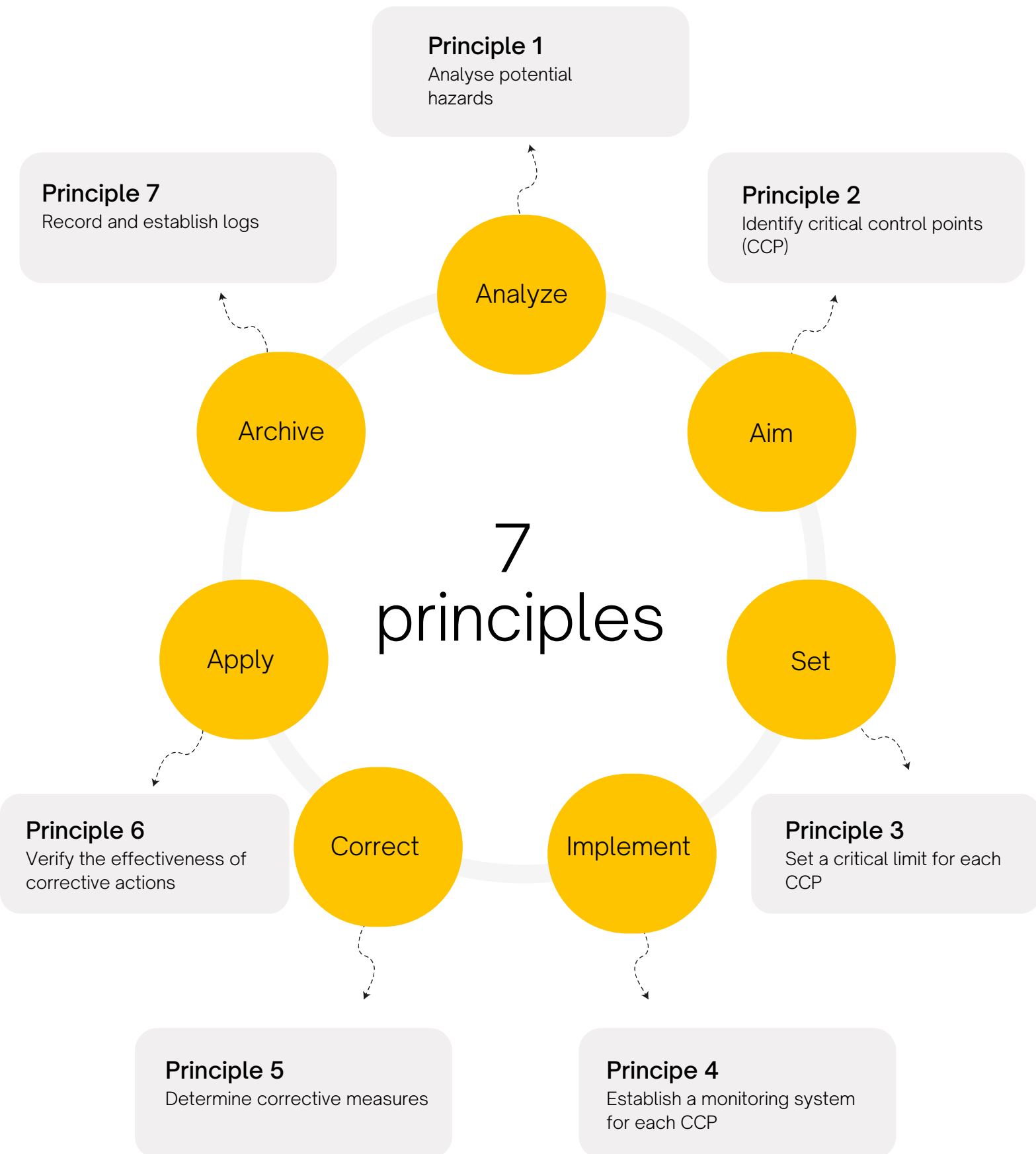
Restaurants, canteens, caterers and other food services use HACCP to guarantee the safety and hygiene of their food preparations.



Control and regulatory bodies

They use HACCP to establish food safety standards and to evaluate producer and supplier compliance with these standards.

The 7 Principles of HACCP



How to implement HACCP?

The implementation of the HACCP method follows a plan composed of 12 steps, including the 7 principles previously seen.

OBJECTIVE?

To identify, evaluate and describe sanitary control measures, in order to guarantee hygiene and safety in any food processing workshop (kitchen, laboratory, etc.)

The preliminary steps



Step 1: Form your HACCP team

Step 2: Describe your product and how it is distributed

Step 3: Identify the intended use of your product

Step 4: Create a diagram of the manufacturing process

Step 5: Confirm each step of the diagram on-site

Step 6: Analyse potential hazards

Step 7: Identify critical control points (CCP)

Step 8: Set a critical limit for each CCP

Step 9: Establish a monitoring system for each CCP

Step 10: Determine corrective measures

Step 11: Verify the effectiveness of corrective actions

Step 12: Document and keep records



The 7 Principles of HACCP

Focus on the 12 Steps

Step 1: Form your HACCP team

Firstly, it is crucial to select an HACCP team within the company, with expertise and direct involvement in the implementation of sanitary safety protocols.

- ☐ Form a team of professionals
- ☐ Identify an HACCP methodology expert who will guide the team
- ☐ Define a first object of study, which could be a product or a type of hazard

Example: Let's imagine you have a central kitchen

The team could be made up of kitchen chefs, cleaning staff, supply chain staff, and managers. It would also be useful to have a food safety expert or an HACCP consultant.

Step 2: Describe your product and/or process

This step is used to identify and understand the influence of various factors on the emergence or increase of a hazard.

- ☐ For each product, be sure to gather this information:
 - ☐ Physical and chemical characteristics (for example, preservatives, pH)
 - ☐ Special treatment procedures (such as freezing, salting)
 - ☐ Packaging
 - ☐ Storage
 - ☐ Conservation and expiration dates (including use by or best before dates)

Example:

The soup is prepared from fresh vegetables, meat, broth, spices and is simmered.

Focus on the 12 steps

Step 3: Identify the intended use of your product

In this phase, the aim is to describe the different possible uses of the product by consumers, including those not initially envisaged.

- ☐ Describe the different possible uses of the product.
- ☐ Specify the expected shelf life of the products.
- ☐ Indicate their storage conditions.

Example:

The soup is intended to be served as part of meals prepared by the central kitchen.

Step 4: Develop a process flow diagram

The manufacturing diagram provides a visual representation of each step in a product's journey. HACCP experts scrutinise each phase of production, from the arrival of raw materials to the storage and dispatch of finished goods.

- ☐ Establish the process diagram.

Example :

The diagram describes all steps of the soup preparation, from the purchase and receipt of ingredients to the cooking and serving.

Focus on the 12 steps

Step 5: On-site confirmation of each step in the diagram

This step allows theory to be compared to practice. For instance, this exercise could reveal that a work surface wasn't cleaned between two steps.

- ☐ Compare actual operations with theoretical steps
- ☐ Note any discrepancies between theory and practice
- ☐ Incorporate all observed variations into the production diagram

Example:

The HACCP team must ensure that the manufacturing diagram is consistent with the actual processes practiced in the central kitchen.

Step 6: Analyse potential hazards (Principle 1)

This step involves gathering and reviewing various hazards and the circumstances that could favour their emergence. The goal is to identify those that are important for food safety and therefore require monitoring.

- ☐ List the hazards that can occur during the product's production
- ☐ Classify these hazards into the three categories
- ☐ Identify and evaluate the specific risks of each (based on frequency and severity)
- ☐ Sort and rank these hazards according to their importance
- ☐ Identify the most significant hazards from the scores obtained

Example :

There is a risk of contamination by pathogenic bacteria if the vegetables are not properly washed or if the meat is not cooked thoroughly.

Focus on the 12 steps

Step 7: Identify Critical Control Points (Principle 2)

The goal of this phase is to identify the Critical Control Points (CCPs), i.e., the steps that require genuine supervision. It is essential to monitor and manage these points to eliminate or control a risk.

- ☐ Determine the essential CCPs to maintain the hygienic quality and safety of the product.
- ☐ Retain the CCPs where loss of control leads to unacceptable risk.



You can facilitate the identification of critical points using a decision tree.

Example :

CCPs could be the washing of vegetables, the cooking of meat, and the final cooking of the soup.

Step 8: Set a critical limit per CCP (Principle 3)

A critical limit = a value beyond which control of the identified hazard is no longer guaranteed. This step, therefore, involves distinguishing what is acceptable from what is not and confirming the effectiveness of each preventive action put in place.

- ☐ Set a critical limit for each identified CCP.



In practice, the limits are usually already determined by existing regulations. However, they can also be influenced by specific customer requests.

Example :

For the cooking of meat and soup, a critical limit could be that the internal temperature must reach at least 75°C.

Focus on the 12 steps

Step 9: Establish a monitoring system by CCP (Principle 4)

After determining the critical limits, it is important to establish a monitoring plan for each identified hazard. An individual responsible for this monitoring should be appointed or the monitoring process described precisely.

- ☐ Define the methods and frequency of monitoring for each CCP.
- ☐ Determine who will perform the monitoring.
- ☐ Perform analyses and measurements.

Example :

A probe thermometer could be used to check the internal temperature of the meat and soup during cooking.

Step 10: Determine corrective actions (Principle 5)

Establishing corrective and preventive actions is an essential phase, which illustrates your ability to solve a problem and prevent its recurrence.

- Corrective actions = eliminate the hazard once it has occurred.
 - Preventive actions = prevent the recurrence of a hazard.
- ☐ Define simple and immediate corrective actions.
 - ☐ Record corrective measures in the Health Management Plan (HMP).
 - ☐ Manage non-compliant products.
 - ☐ Develop an action plan for non-compliant products generated during the loss of control.
 - ☐ Consider options such as isolating the batch or reintegrating it into the process.
 - ☐ Define the conditions for reintegration if this option is chosen.

Example :

If the meat or soup does not reach the critical limit, corrective actions could be to extend the cooking time or increase the cooking temperature.

Focus on the 12 steps

Step 11: Verify and validate the plan (Principle 6)

To ensure that your HACCP plan is a comprehensive and trustworthy quality approach, it is essential to review and update it regularly.

- ☐ Check your plan at least once a year.
- ☐ Choose one or more verification tools (customer claim indices, internal audits, tests, sample collection and analysis, etc.)
- ☐ Update the plan if necessary.

Example :

Regular audits of the cooking process and microbiological tests on the cooked soup could be put in place to verify that the HACCP system is working correctly.

Step 12: Document and keep records (Principle 7)

The final step consolidates all the previous phases by writing an HACCP document. To do this, you must maintain a complete register of established documents and procedures, which should be up-to-date and readily available.

- ☐ Ensure that the HACCP plan is valid and followed in your establishment.
- ☐ Ensure that the HACCP system is simple and easy for everyone to use.
- ☐ Archive everything that has been created for the implementation of HACCP.
- ☐ Ensure that all HACCP documents are easily accessible in case of inspection.

Example :

All temperature records, test results, corrective actions, and checks should be recorded to demonstrate compliance with the HACCP system.

Practical Case Study #1



Let's take the example of refrigerated transportation of fresh food products.

01 Form your HACCP team

Create an HACCP team composed of the logistics manager, a delivery driver, and possibly an external consultant.

02 Describe your product and/or process

Fresh products include vegetables, dairy products, meat, and fish.

03 Identify the intended use of your product

The products are intended for retail sale for direct consumption by the consumer.

04 Draw up a process diagram

The steps include: loading of products, transportation, unloading, and delivery to the point of sale.

05 On-site confirmation of each step in the diagram

Monitor the transportation process to ensure that the diagram is correct.

06 Analyze potential hazards

Identification of potential hazards, for example: rise in refrigeration temperature, cross-contamination between products, delivery delay.

Cas pratique n°1 : suite

07 Identify Critical Control Points

The identified CCPs could be the refrigeration temperature during transport and the delivery time.

08 Set a critical limit for each CCP

The refrigeration temperature should not exceed 4°C for fresh products. The delivery time must be respected to ensure product freshness.

09 Establish a monitoring system by CCP

A temperature control system will be used to continuously monitor the temperature during transport. Delivery time will be monitored using a GPS tracking system.

10 Determine corrective measures

If the temperature exceeds 4°C, the vehicle will be stopped for an inspection and repair of the cooling system. In case of delay, the customer will be informed, and a solution will be sought to minimize the impact on product quality.

11 Verify and validate the plan

The HACCP team will regularly review control records and carry out periodic audits of the system to ensure that it is working correctly.

12 Document and keep records

Keep records of transport temperatures, corrective actions taken, and results of checks and audits.

Practical Case Study #2



Let's take the example of bread production in an artisanal bakery.

01 Assemble your HACCP team

Create an HACCP team composed of the head baker, an assistant, and possibly an external consultant.

02 Describe your product and/or process

Artisan bread baked in a traditional oven. The ingredients are: flour, water, yeast, salt.

03 Identify the intended use of your product

The bread is intended for direct consumption by the end consumer.

04 Draw up a process diagram

The steps include: weighing of ingredients, kneading, dough resting, shaping, secondary fermentation, baking, cooling, and selling.

05 On-site confirmation of each step in the diagram

Monitor the manufacturing process on-site to ensure that the diagram is correct.

06 Analyze potential hazards

Identification of potential hazards, for example: bacterial contamination of flour, presence of foreign bodies in the flour, error in weighing ingredients.

Cas pratique n°2 : suite

07 Identify Critical Control Points

The identified CCPs could be checking the quality of flour upon receipt, baking the bread (temperature and duration) to eliminate potential bacterial contaminants.

08 Set a critical limit for each CCP

For baking, the bread must reach an internal temperature of 95°C for at least 15 minutes.

09 Establish a monitoring system by CCP

A thermometer will be used to check the internal temperature of the bread after baking.

10 Determine corrective measures

If the bread does not reach the required temperature, it will be baked longer until it reaches the correct temperature. If the flour is contaminated, it will be returned to the supplier.

11 Verify and validate the plan

The HACCP team will regularly review control records and carry out periodic audits of the system to ensure it is working correctly.

12 Document and keep records

Keep records of transport temperatures, corrective actions taken, and results of checks and audits.

HACCP Software

To help you set up and effectively manage your HACCP plan, you can use HACCP software.

NON-EXHAUSTIVE LIST OF HACCP SOFTWARE

Haccp Facile

[Please consult the website](#)

Traqfood

[Please consult the website](#)

Safefood 360

[Please consult the website](#)

Octopus HACCP

[Please consult the website](#)

ePack Hygiene

[Please consult the website](#)

EEat HACCP

[Please consult the website](#)

SO EASY HACCP

[Please consult the website](#)

Keyfood-Haccp

[Please consult the website](#)

Melba

[Please consult the website](#)

Zest HACCP

[Please consult the website](#)