

Module 09 Lecture 02

**Hazard analysis and
critical control point determination**

Hazard analysis

The process of collecting and evaluating information on hazards and conditions leading to their presence to decide which are significant for food safety and should be addressed in the HACCP plan

(Codex Alimentarius 1997)

HACCP Decision Tree

Questions for each hazard
and each raw material

Q 1. Could the raw material contain the hazard at dangerous levels?

YES

NO

Not a CCP

Q 2. Will further processing / handling (including correct consumer use) remove the hazard or reduce it to a safe level?

YES

NO

Not a CCP

CCP

HACCP Decision Tree

Questions for each hazard
and each process stage

Q 3. Is the formulation / composition of the intermediate or final product essential to prevent unacceptable increase of the hazard?

YES

NO

Not a CCP

**Formulation or
composition is
CCP**

HACCP Decision Tree

Questions for each hazard
and each process stage

**Q 4. Is (re)contamination possible?
Is increase of the hazard possible?**

YES

NO

**Q 5. Will further processing / handling
(including correct consumer use)
remove the hazard?**

Go to Q6

YES

NO

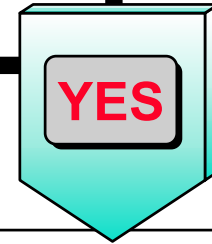
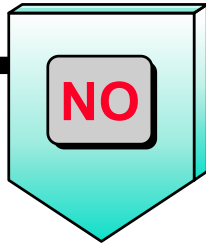
Not a CCP

CCP

HACCP Decision Tree

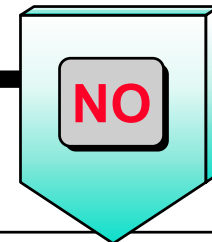
Questions for each hazard and each process stage

Q 4. Is (re)contamination possible?
Is increase of the hazard possible?



Go to Q5

Q 6. Is the process stage intended to eliminate or reduce the hazard to safe levels?



Not a CCP



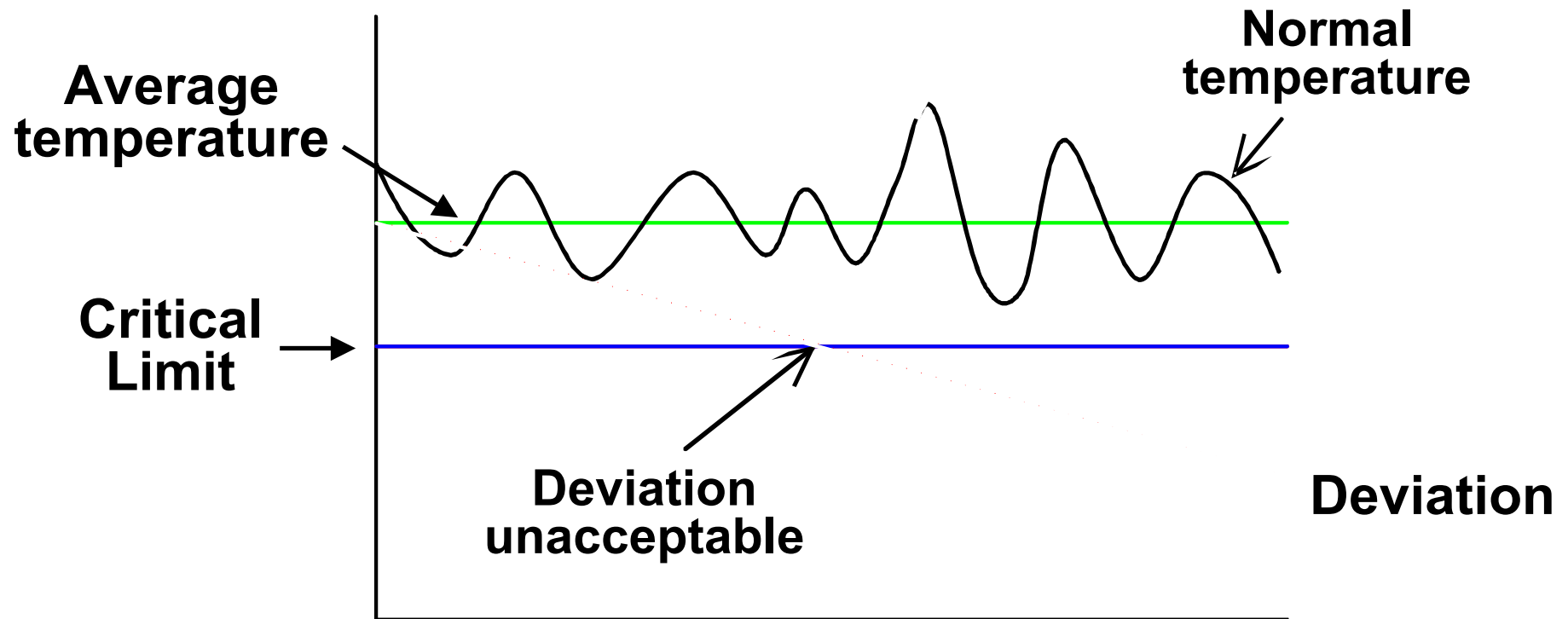
Questions for each CCP and hazard

1

*When is deviation from normality
unacceptable?*

(i.e. establishment of Critical Limits)

Defining limits of deviations



Questions for each CCP and hazard

2

How can this be identified?

How frequently should it be checked?

How should results be recorded?

(i.e. establishment of monitoring procedures)

Questions for each CCP and hazard

3

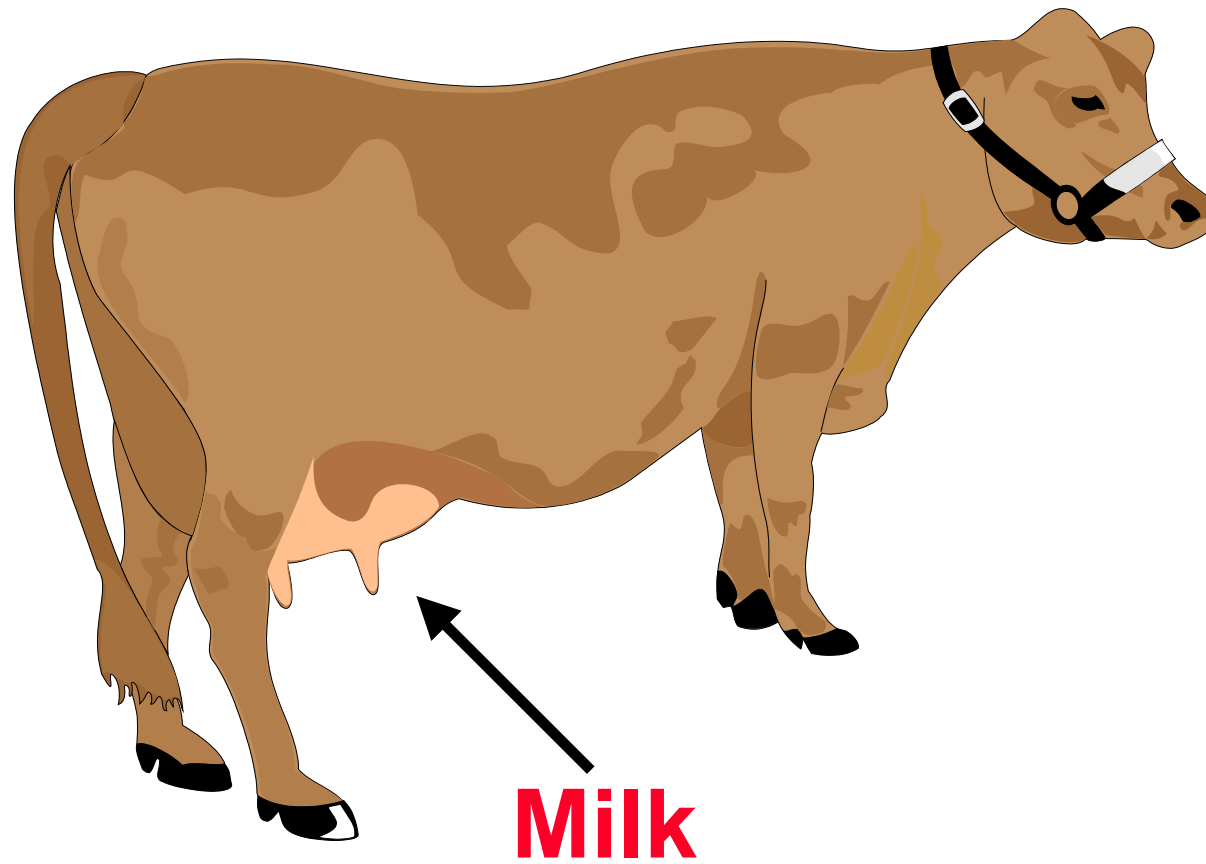
***What is the appropriate reaction
to deviations?***

(i.e. description of corrective actions)

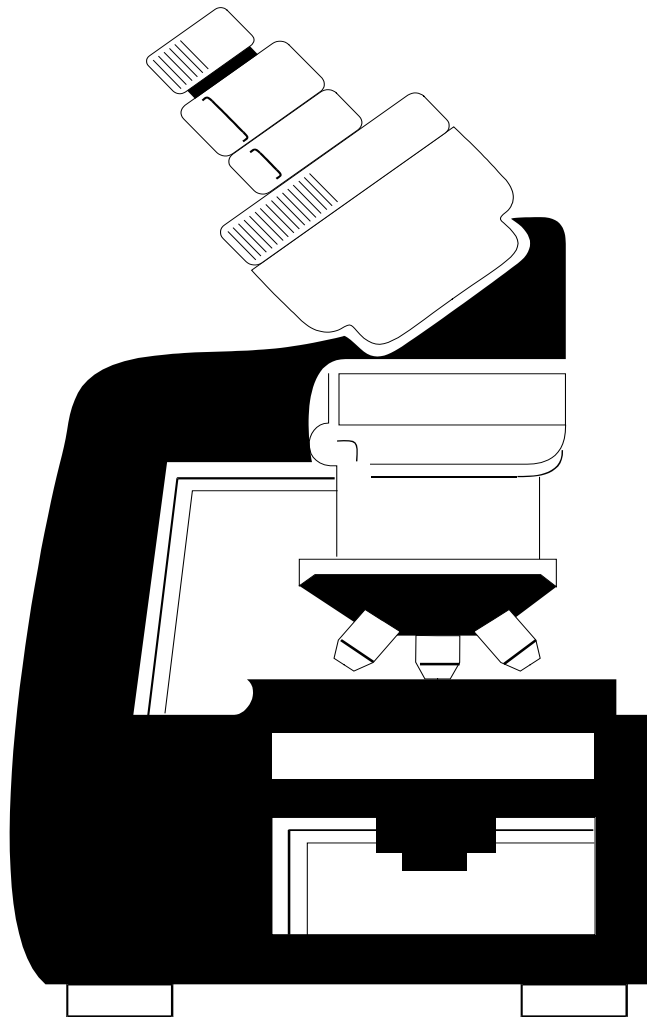
HACCP plan

**A document specific to
each production line and
product which,
when correctly applied,
should prevent
food safety problems**

Raw material



Potential hazards



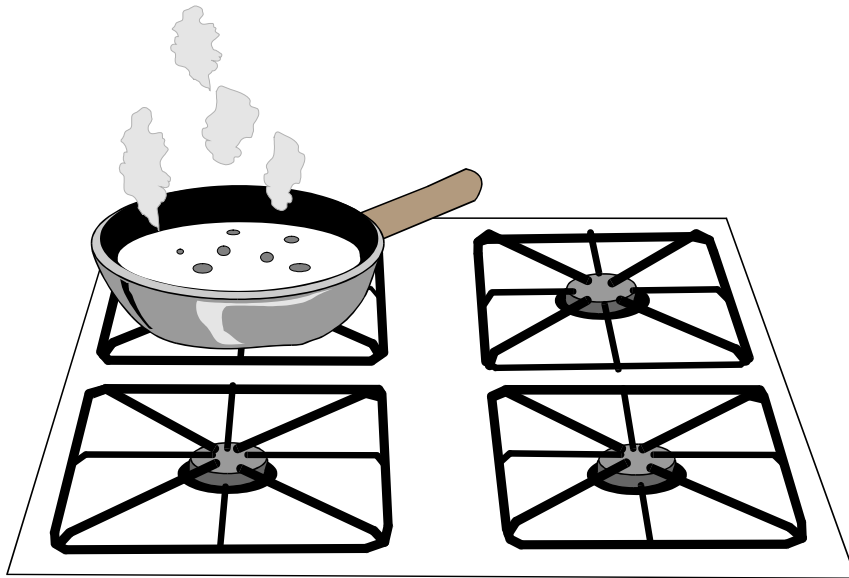
Salmonella
Campylobacter

Control measure



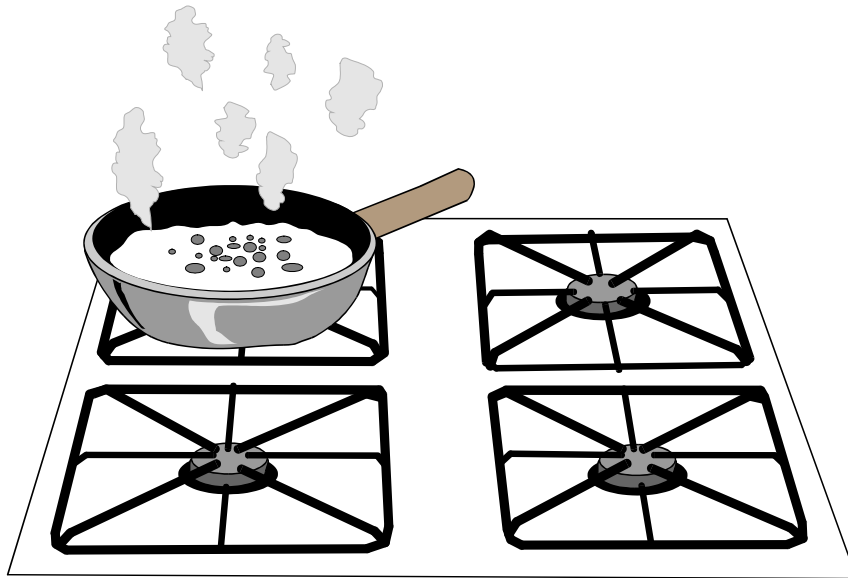
Heating

Critical Control Point



Boiling in pan

Critical limit



Foam formation

Monitoring



Observation of foaming

Verification



Observation of foam residues

Use



Drinking while still hot
(This prevents recontamination and growth, which may lead to hazards)