

Module 09 Lecture 01

HACCP
the system and definitions

HACCP

If we know which factors affect the activities of microorganisms, we can predict when hazards might arise and also prevent or control the hazards.

This is the underlying concept of the Hazard Analysis and Critical Control Point approach to designing and building safety into foods.

Traditional food safety assurance system

- ***GMP / GHP***
for safe food production
- plus
- ***End - product testing***
for obtaining assurance of safety

Traditional food control

- **Inspection for compliance with GHP / GMP**

plus

- **End-product testing**

Food safety assurance

Good Manufacturing Practice

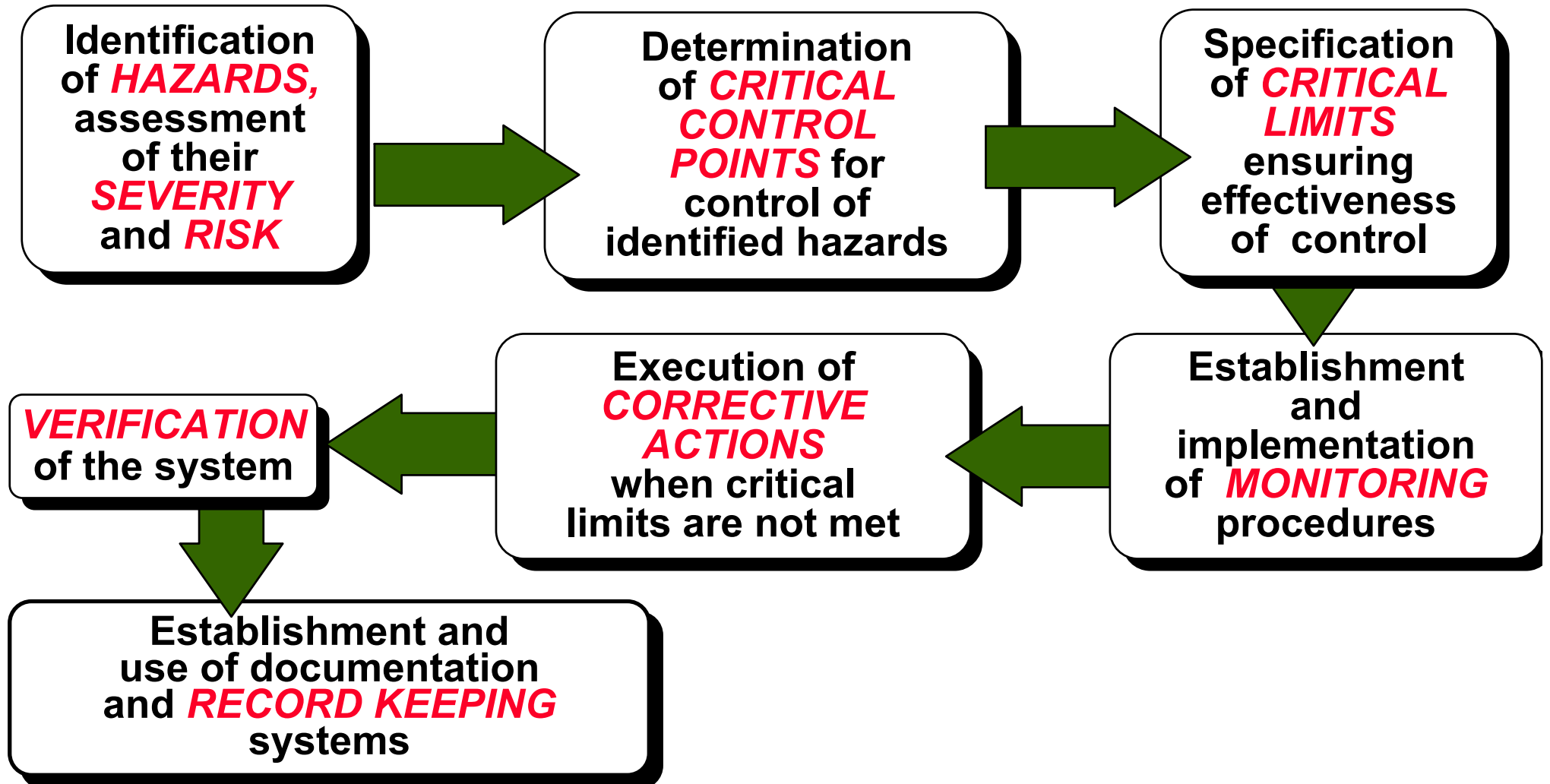
+

Good Hygienic Practice

=

necessary but not sufficient

The HACCP System



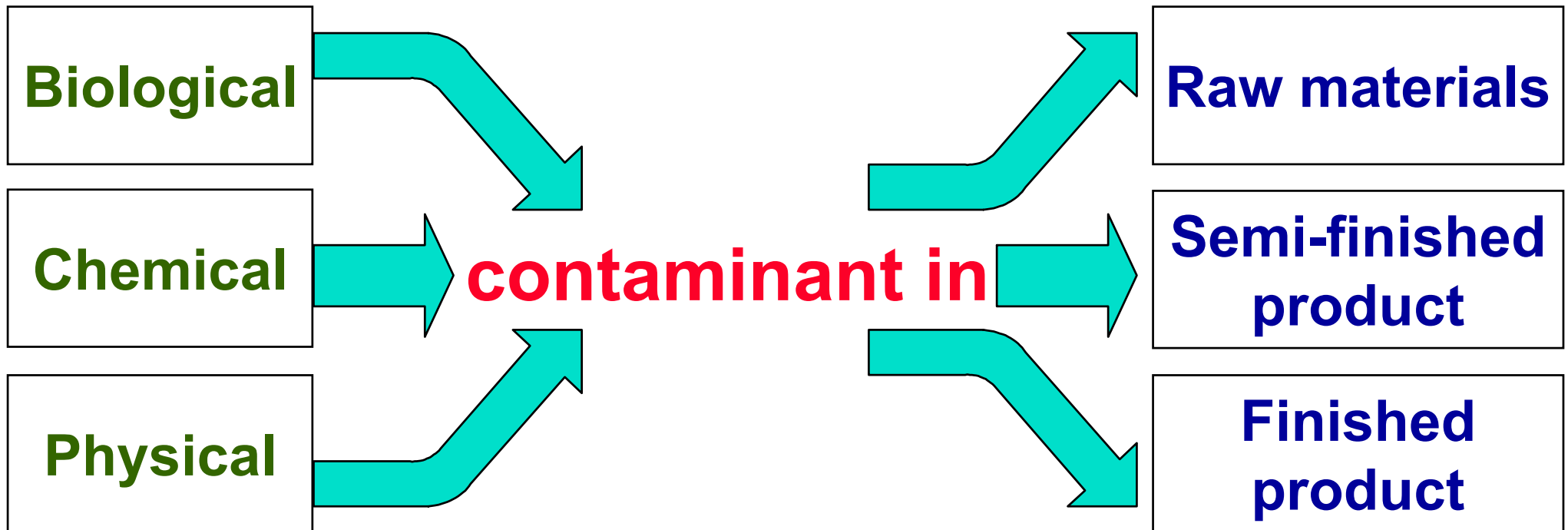
Hazard

**A biological, chemical, or physical
agent in, or condition of, food
with the potential
to cause an adverse health effect**

Codex Alimentarius, 1997

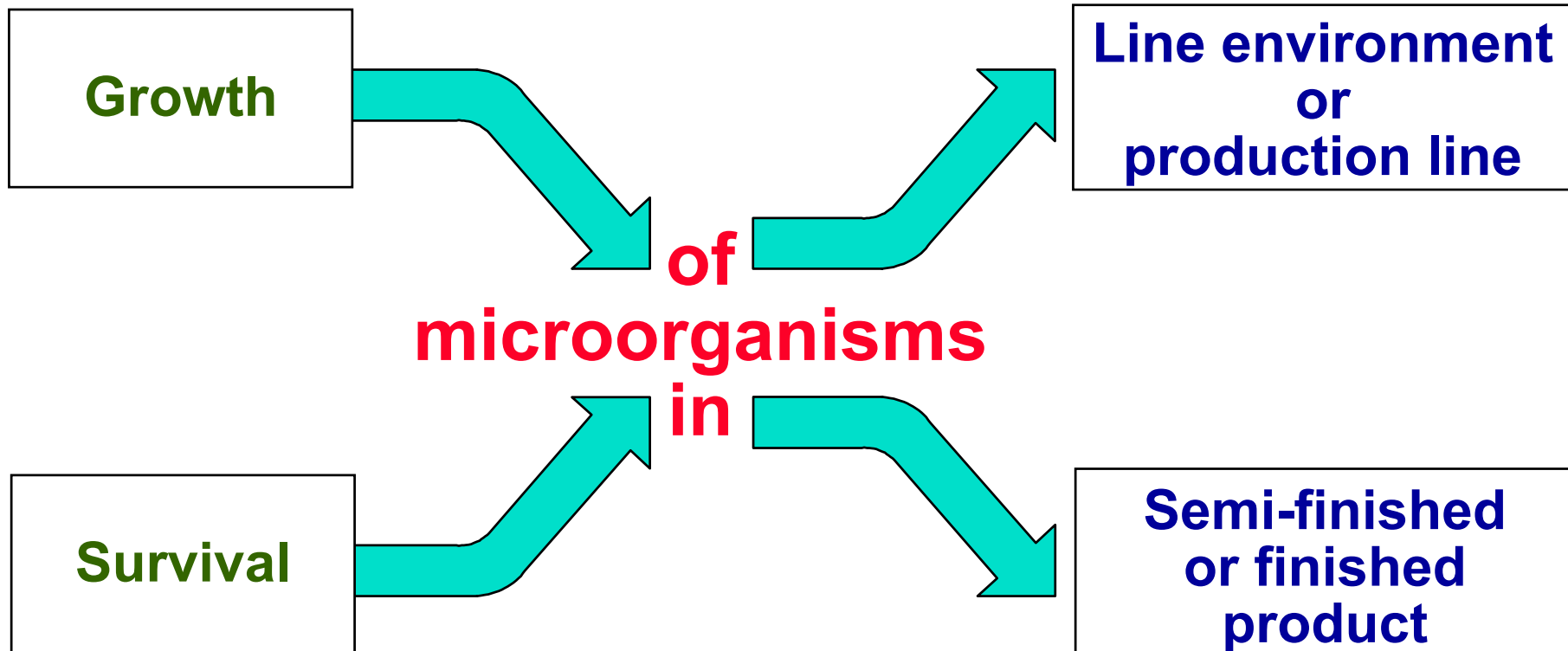
Hazards and sources of hazards

The unacceptable presence of a



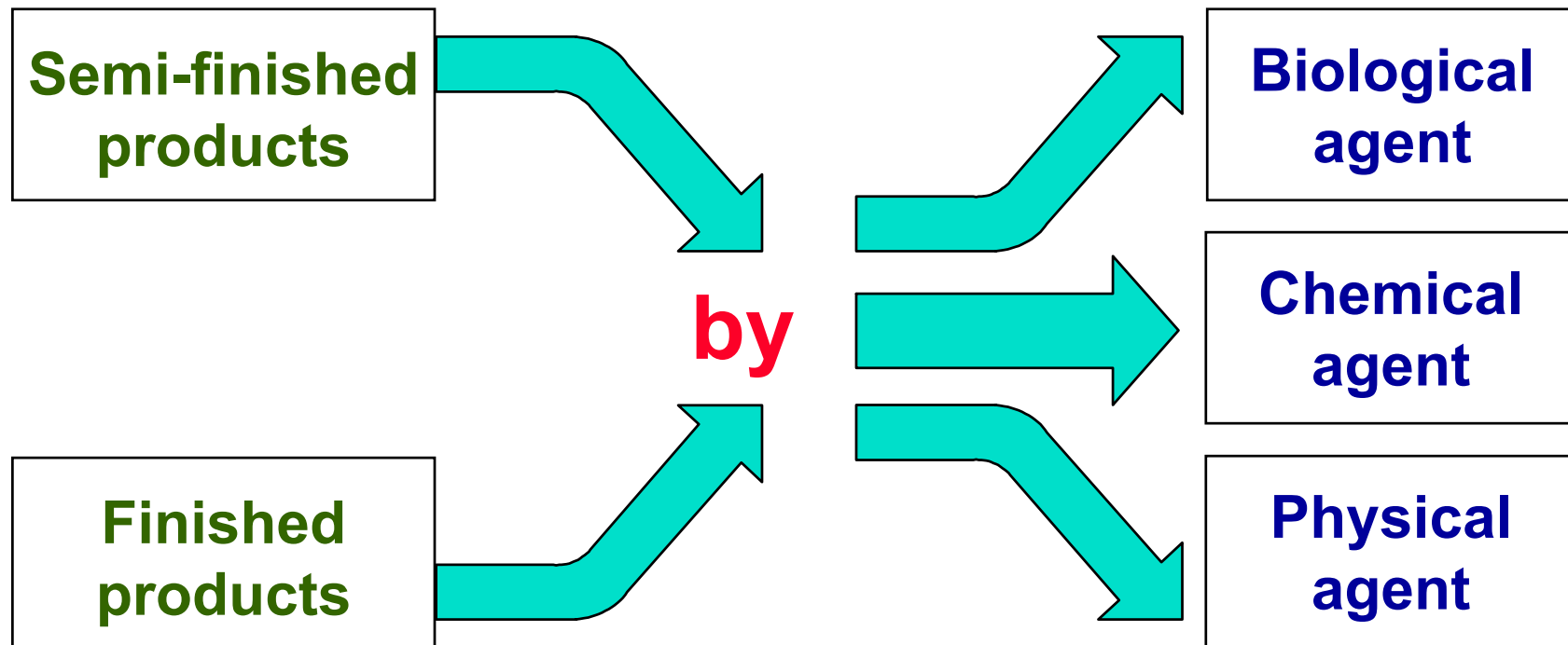
Hazard analysis

Identify unacceptable

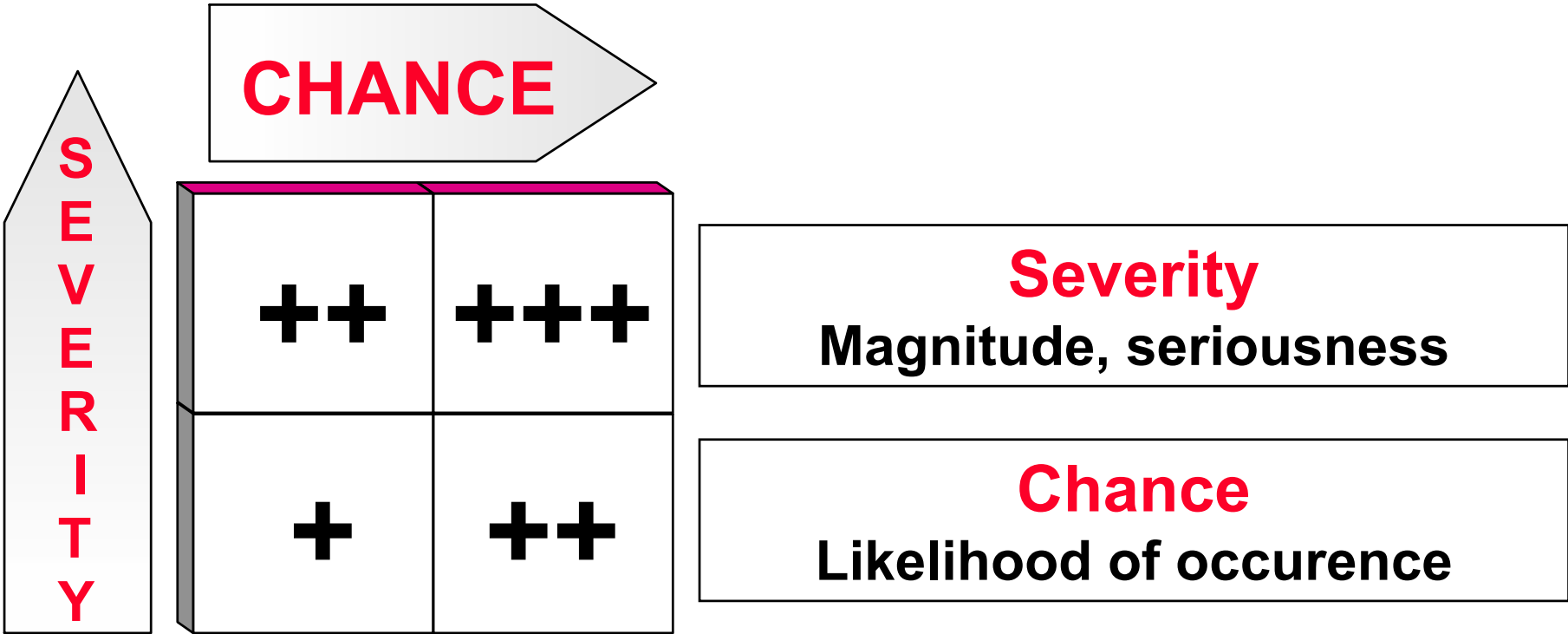


Hazard analysis

Identify unacceptable (re)contamination of



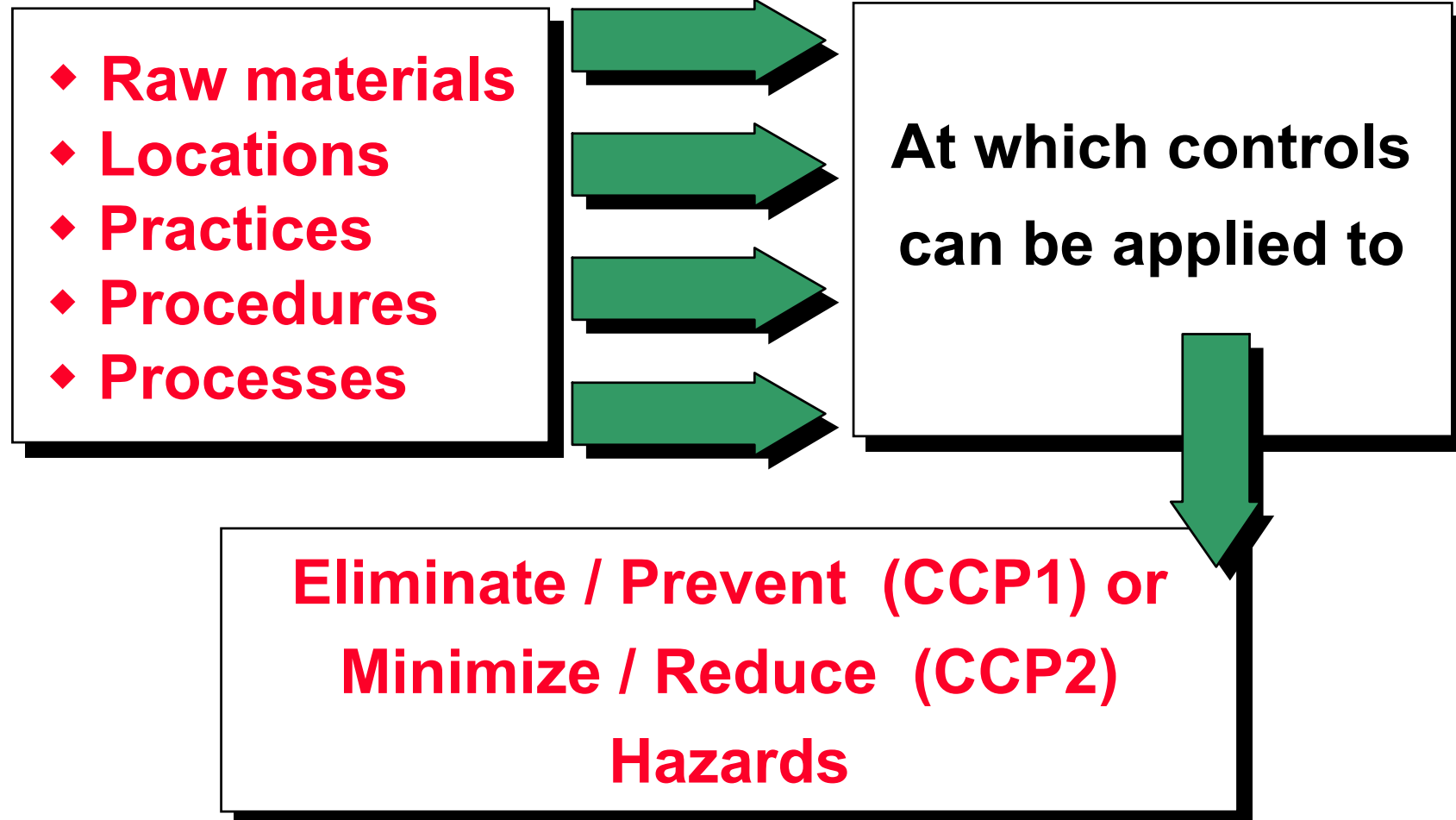
Concern



Control measures

**Actions and activities
that can be used
to prevent or eliminate
a food safety hazard
or reduce it to an acceptable level**

Critical Control Points



Critical limit

A value which separates

acceptability

from

unacceptability

Target value

**A value or characteristic
of a *physical, chemical or biological* nature
which is used to assure that
critical limits are met**

Monitoring

*Checking the effectiveness of
the control at a CCP*

It involves systematic

- ◆ **Observation**
- ◆ **Measurement**
- ◆ **Recording**

Corrective actions

- **Actions to be taken when the results of monitoring at the CCP indicate a loss of control**
- **Should ensure that only safe products reach the consumer**
- **Should prevent the event from occurring again.**

Verification

Checking the effectiveness of

HACCP

HACCP Data Sheet

Raw Materials	Hazards	Control Measures	Critical Limits	Monitoring procedures	Corrective Actions
Process step	Hazards	Control Measures	Critical Limits	Monitoring procedures	Corrective Actions



Objectives of the HACCP system

Prevention of foodborne illness

Reduced costs
of food analyses

More efficient
quality assurance
system

Reduced
losses related to
product recall

Protection of reputation