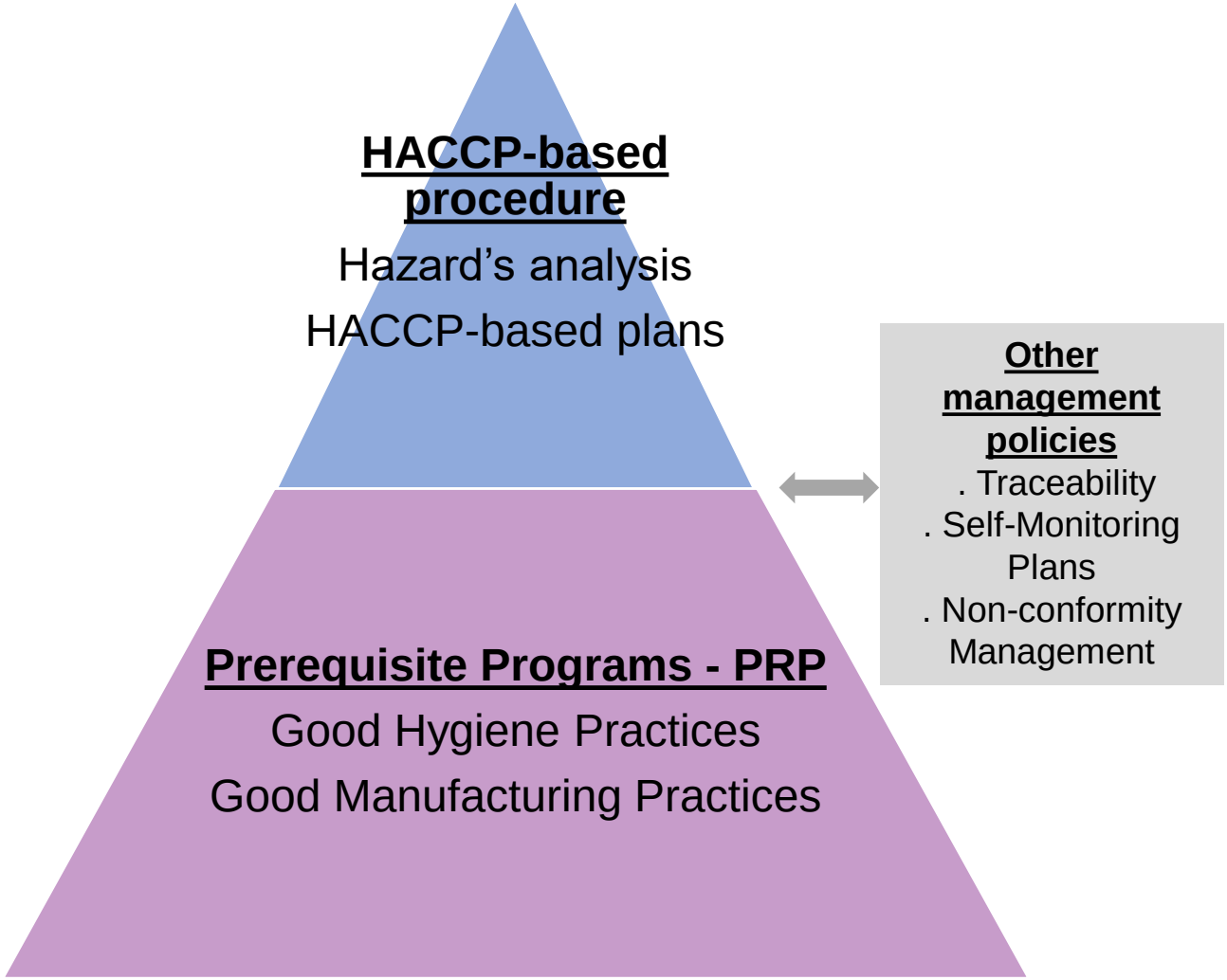
VII
Self-Monitoring

Teacheesy

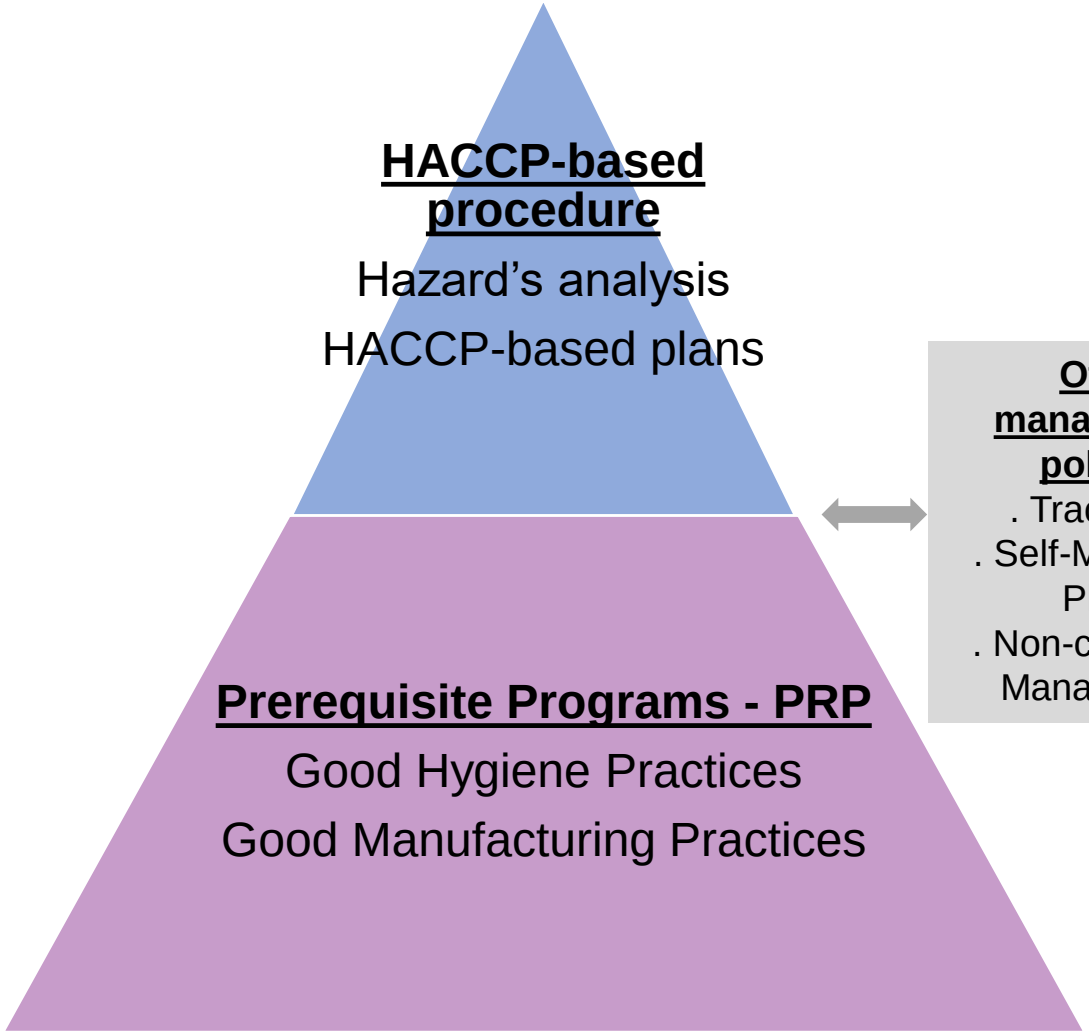
Farmhouse and Artisan Cheese & Dairy Producers European Network

Erasmus+

FSMS in resume



FSMS in resume



Other management policies
. Traceability
. Self-Monitoring Plans
. Non-conformity Management

Self monitoring plans are part of the management policies that play an essential role in a FSMS

Control hazards by self monitoring measures at all stages:

- GHP
- GMP
- HACCP based plans
- Staff training
- Analysis during production process
- Analysis of products to verify FSMS
- Traceability
- Non Conformity Management

Example: self monitoring measures to control *Listeria monocytogenes*

- GHP -> regular inspection and maintenance of milking machine
- GMP -> acidification of a product
- HACCP based plans -> monitoring of acidification
- Staff training -> training of milking staff
- Analysis during production process -> monitoring smear water, testing processing areas and equipment for *L. monocytogenes,* product testing with n=1
- Analysis of products to verify FSMS -> product testing with n=5
- Traceability -> record keeping systems which enables tracing back and forward
- Non Conformity Management -> suspension of distribution and product withdrawal or recall

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2.5

3.2

5.2

6.2

7.2

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All measures in the Food Safety Management System together make sure that food safety hazards are eliminated, prevented or reduced to an acceptable level.

Considerations when making a sampling plan

- Purpose of collecting a sample
- Effectiveness of sampling
- Bottleneck management

Purpose of collecting a sample -1

- What is the objective of the analysis?
  - To demonstrate the efficiency and effectiveness of the FSMS (validation and verification)
  - To assess the acceptability of a certain batch or a process

7.1

→ Product testing (n=5) appropriate against microbiological criteria in Annex I of Regulation 2073/2005.
→ Frequency not prescribed in regulation: responsibility of the producer

Purpose of collecting a sample - 2

- What is the objective of the analysis?
  - To control the production process

→ Testing procedures (frequency and number of samples (n)) should be based on producer's assessment.

7.1

Except for a few type of products for which minimum frequencies of testing are fixed in the regulation (e.g. milk as primary material).

Effectiveness of sampling - right place and moment

- Sampling can be done during the whole production process, not only on finished product
- Method depends on what the producer wants to check, e.g.:
  - Effectiveness of change in disinfection – check total bacterial count on disinfected material/surface
  - Absence of Listeria on washed rind cheese – test smear water
  - Effectiveness of pasteurisation – check pasteurised milk for alkaline phosphatase or Enterobacteriaceae

Effectiveness of sampling – do it correctly

Important:

- Use a method which identifies organisms appropriate to process or product
- Use an aseptic sampling technique to avoid cross contamination
- Make sure the sample arrives at the laboratory in undamaged condition and at right temperature
- Follow instructions supplied with commercial sampling kits

Effectiveness of sampling – do it clever

Reduce number of samples and costs by using other sampling and testing procedures like pooling samples together, using of alternative sampling sites and using of trend analyses if competent authority agrees.

7.5

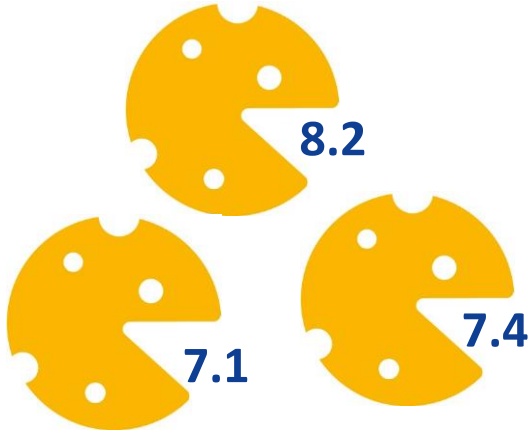
‘Bottleneck’ management

Every hazard has its most important source of contamination. It can be more effective to monitor those sources by process or environmental controls than by end-product testing.

Important!
Before sampling be sure that:

- You can interpret the outcome of the analysis correctly
  - type of sample (product, environment, method, …)
  - limits (legal requirements, own target value, …)

- You know what you need to do when there is a positive finding:
  - non conformity management
  - corrective actions
  - preventive actions



Tools available for this section

7.1 Presentation Difference between ‘Sampling during production process or for validation’
7.2 Fact sheet Statistics of microbiological sampling
7.3 Exercises Statistics of microbiological sampling
7.4 Training How to set up a sampling plan
7.5 Fact sheet Sampling strategies
7.6 Hazard prevention plan
7.7 Instruction sheet for group work milk testing
9.2 List of shelf life studies