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Presentation of the GGHP

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Presentation of the GGHP (the Guide)

- Why this Guide?
- History of the development of the Guide
- What does 'officially endorsed' mean?
- Food Safety Management Systems (FSMS) and the Guide
- Main principles of the Guide
- Hazards identified
- Flexibility
- How will producers use the Guide?



Why this Guide?



Why this project of the 'European guide'?

- **Hygiene Package** (see Regulation 852/2004-art.5) requests the realisation and application of permanent procedures based on HACCP principles for all the food operators.
- Guides for good hygiene practices are presented as useful tools to help the operators to fulfill this regulation (see Regulation 852/2004 – art.1 (e))

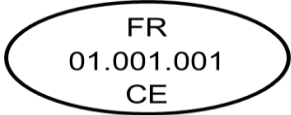


Why this project to support the ‘European Guide’?

- There are many similar problems, in different countries with the implementation of the hygiene package in small dairies
- National administrations “putting the blame” on European Union
- In many cases, a clear choice to keep us in a derogative status
- Not enough implementation of flexibility provisions
- **We wanted to be totally in the scope of the EU regulation**
- **Recognition of our specific knowledge on food safety management in our sector**
- **A simple tool for producers to improve their food safety management**
- **Examples of flexibility provisions**



Who is this guide designed for?

- **"Farmhouse"** cheese and dairy producers: process milk from at least the **majority of their own livestock** according to traditional methods
- **"Artisan"** cheese and dairy producers: collect **milk from local farmers** and process it in small structures according to traditional methods
- The voluntary guide is applicable **whatever their status:**
 - ✓ **European approval** 
 - ✓ **registration** (according to the country: derogation, exclusion...for local sale)



The objectives of the European Guide

Our aim was to provide the producers with a reference document:

- **To help them to prepare their Food Safety Management System** (risk analysis, HACCP based procedures,)
- **Taking into account their real practices**
- **Giving practical examples regarding flexibility and adaptations, derogations**

The unique relevance and the power of the GGHP:

- **Drafted by producers and specialists of the sector**
- **Endorsed by the public authorities of the 28 Member States, and European Commission**



The GGHP

on the website of the European Commission:

https://ec.europa.eu/food/safety/biosafety/food_hygiene/guidance_en (on this page, click on: “guidelines provided by stakeholders organizations” and then on “EN/...” close to “European GGHP in the production of **ARTISANAL** cheese and dairy production”).

European Guide for Good Hygiene Practices

**in the production of artisanal
cheese and dairy products**

Target:

Farmhouse and Artisan producers

**Farmhouse and
Artisan
Cheese & Dairy Producers
European Network**





GGHP available in 24 languages:

English

français

español

Gaelige

čeština

eesti

latviešu

magyar

Malti

português

slovenčina

suomi

Deutsch

Nederlands

italiano

hrvatski

dansk

ελληνικά

lievtiņ

български

polski

română

slovenščina

svenska



History, Spirit & Endorsement



History of the project: from the idea... .. to the endorsement

- 2010: first exchanges within FACEnetwork about this project.
- 2010 – 2014: several contacts/meetings with the European Commission, and with the European Parliament to explain the proposed project and ask for subsidies.
- March 2015: thanks to the support of several European Deputies, DG SANTE granted subsidies to FACEnetwork (« pilot project »).
- **March 2015 – March 2016: writing of the GGHP.**
- March 2016 – December 2016: assessment by EC and the 28 MS > amendments, negotiations
- 16th September 2016: Standing Committee PAFF (with FACE's participation).
- **13th December 2016: official endorsement.**
- 2017: translation into the 23 official languages of EU.
- **22th November 2017: conference in Brussels - official presentation.**



The spirit of the GGHP

- The **expertise of technicians and producers** is the basic principle
- The overall approach is **preventive** and **based on good practices** implementation
- The **HACCP principles** are completely applied and adapted to our products, through:
 - a generic hazards analysis
 - HACCP-based plans: they make the link between the hazards and each type of products.

The GGHP is the Food Safety Management System (FSMS)



The spirit of the GGHP

Other strengths of the GGHP:

- **No CCPs** (not adapted to our type of production)
- **Examples of flexibility and adaptations** (presented as references)
- **“Records” only if non conformity**
- **Responsibility of the producer = the producer is the skilled person** >
No fixed standard plans or indicative values, in order to let the producer decide of his own practices



What does an « officially endorsed guide mean »?

- The GGHP has been approved by each of the 28 MS of EU:
 - It is not possible to prevent a European producer from using the GGHP if he wants to
 - During inspections, the local inspectors must take into account the GGHP if it is applied
 - The inspections must consist of checking the efficiency of the implementation of the FSMS, but should not question the practices
- It is **not** « a **Regulation** » (its recommendations are not enforceable in court) but applying the Guide allows to comply with the regulation
- The GGHP is not compulsory, but **voluntary**

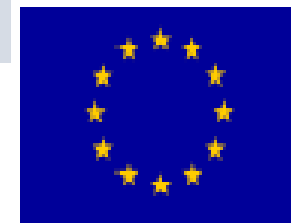


To Conclude: What we wanted?

- To be totally in the field of the EU regulation
- A recognition of our specific knowledge on food safety management in our sector

What we obtained !

- ▶ The FACE GGHP has been endorsed!



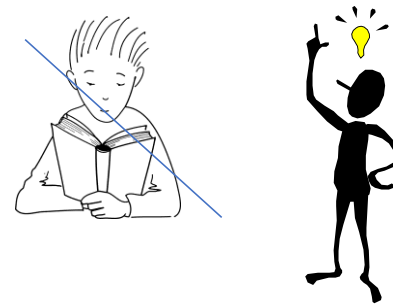


Food Safety Management System (FSMS) & the Guide



GGHP is a tool to comply with the regulatory obligations

- The GGHP is not a technical manual nor a volume listing the regulatory provisions
- The GGHP has not been thought to be a classic 'book', it has been thought to be a **'tool'**



Definition of a tool = anything used as a means of performing an operation or achieving an end (source: dictionary Collins)

In the case of the GGHP, the end is: to allow the user (producer) to be in conformity with his regulatory obligations



What are these obligations?

Regulation (EC) N° 853/2004 – art.4

*“Food business operators (...) shall comply with the **general hygiene requirements** laid down in Annex I and in Annex II of Regulation (EC) N° 852/2004 (...) and with **specific requirements** of Regulation (EC) N° 853/2004”*

Regulation (EC) N° 852/2004 – art.5

*“Food business operators shall put in place, implement and maintain a permanent procedure or **procedures based on the HACCP principles.**”*

Regulation (EC) N° 178/2002

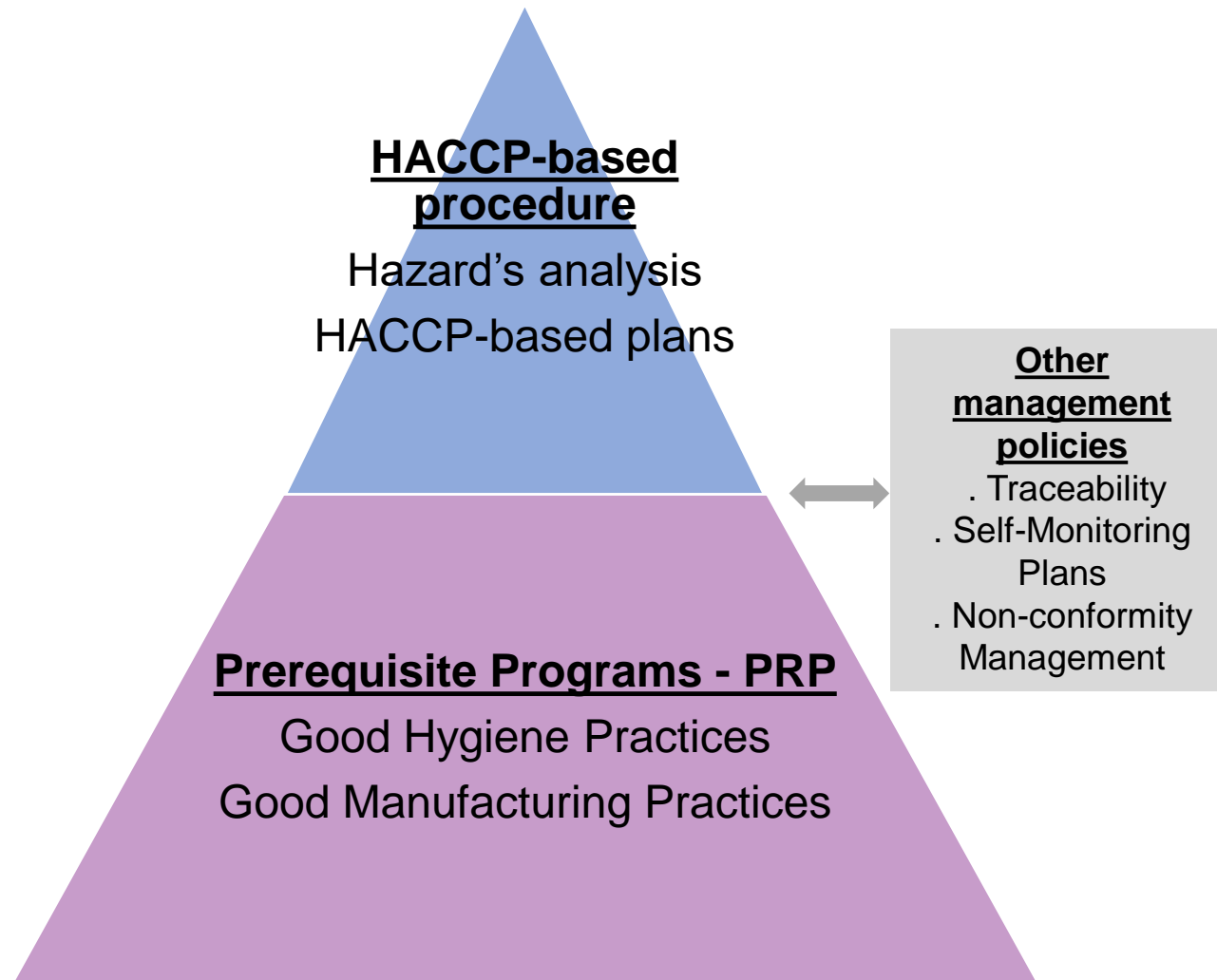
The basic principles are set out:

- **risk analysis approach**
- **primary responsibility of the producer**
- **traceability**

This “pack” of obligations is defined as **Food Safety Management System (FSMS)** in the COMMISSION NOTICE on the implementation of food safety management systems



FSMS in resume



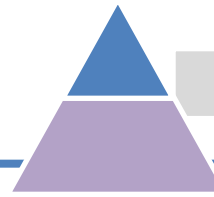
= Food Safety Management System
FSMS

The regulation requires us to, not only implement it, but also to **formalise it**

> A guide is necessary!

Table of contents of the GGHP

> All the FSMS are there!



Section I – THE PURPOSE AND APPLICATION OF THE GUIDE

Section II - GOOD HYGIENE PRACTICES (GHP)

- GHP staff: general hygiene, training and health
- GHP premises and equipment
- GHP cleaning
- GHP disinfection
- GHP pest control
- GHP water quality

Section III – GOOD MANUFACTURING PRACTICES (GMP)

- GMP cultures
- GMP coagulants: production, storage, use
- GMP additions to the milk and curd
- GMP salting
- GMP product storage and transport
- GMP direct sale

Section IV – Risk analysis for Primary Production

- Milk production and storage on the farm

Section V - HACCP-based Plans

- milk collection, storage in the dairy and treatment
- lactic coagulation cheeses
- enzymatic and mixed coagulation cheeses
- cheeses and milk products made by evaporation and precipitation
- pasteurized milk for consumption
- raw milk for consumption
- butter and cream
- fermented milk products
- non fermented dairy products

Section VI - TRACEABILITY

Section VII - SELF-MONITORING

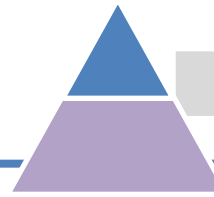
Section VIII - NON CONFORMITY MANAGEMENT

APPENDIX I- HAZARD ANALYSIS FOR MILK PRODUCTS

APPENDIX II - GLOSSARY

Table of contents of the GGHP

> All the FSMS are there!



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GHP and GMP (=PRPs) are designed to control hazards in a general way.

Their management provides the foundation for an effective HACCP implementation.

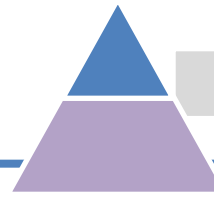
They are composed of all the general hygiene measures adapted to the sector concerned.

For farmhouse and artisan milk products, we identified the **12 PRPs detailed in sections II and III** of the GGHP.

- To set their own procedures, producers can directly use the GHP and GMP procedures of the Guide

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- non fermented dairy products

APPENDIX I- HAZARD ANALYSIS FOR MILK PRODUCTS

These chapters are a « procedure based on HACCP principles » made on the experience of producers and technicians of the sector:

- A general “hazard analysis”

. In the appendix (not to “weigh” on the operational part of the document)

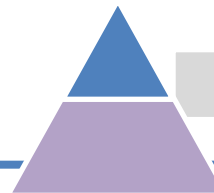
. Main chemical, physical and microbiological hazards are described (nature, characteristics, overall prevention) and the more relevant ones are kept and referred to in the HACCP-based plans

- “HACCP-based Plans”

For each type of process flow (milk and products grouped in 8 big families), a specific and exhaustive analysis is made, presented as a table

Table of contents of the GGHP

> All the FSMS are there!



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- “HACCP-based Plans”

For each type of process flow (milk and products grouped in 8 big families), a specific and exhaustive analysis is made, presented as a table



In synthesis... how should the producers use the GGHP?

- The GGHP = a FSMS adapted to farmhouse and artisan dairy production
- It is written as a practical tool (tables, examples, ...)
- It covers all the possible families of products and all the possible operations made by the producers

Producers can use the GGHP as their own FSMS....

... provided that they personalise it to make it reflect their individual practices



Presentation of the FSMS: Documents or oral explanation?



Page 20 of the GGHP (English version):

“It is not compulsory to document or display (...) procedures. However the producers must be able to explain them.”



Documents or oral explanation?

- REGULATION (EC) No 852/2004 – recital 15:
“The HACCP requirements (...) should provide sufficient flexibility to be applicable in all situations, including in small businesses. (...) the requirement of retaining documents needs to be flexible in order to avoid undue burdens for very small businesses.”

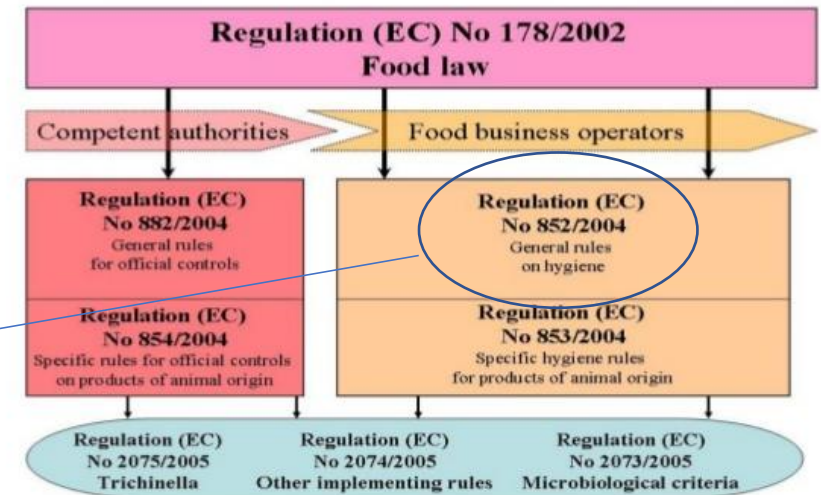
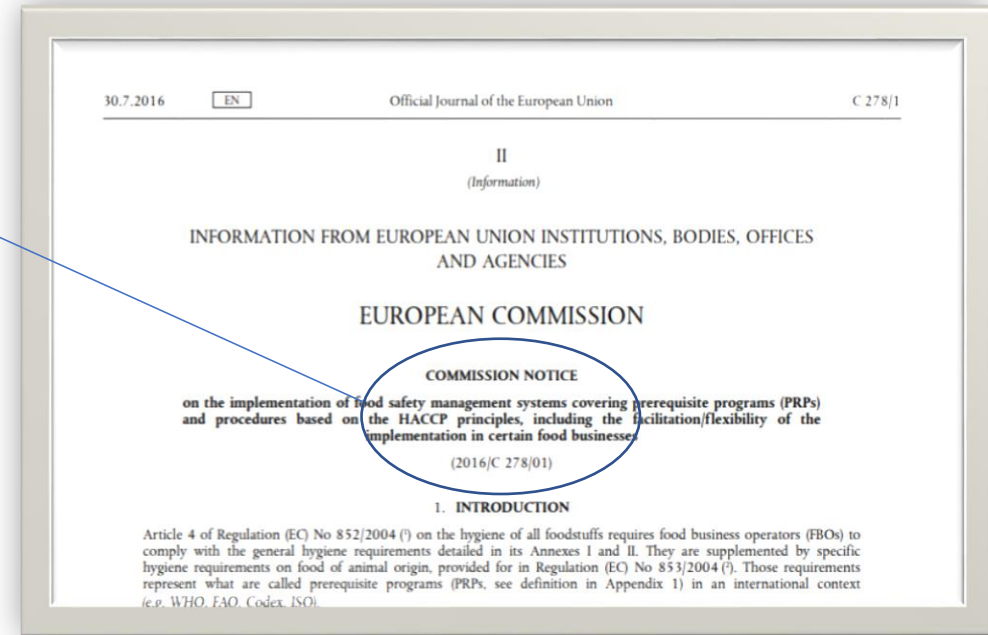


Image Source: EC DG SANCO



Documents or oral explanation?

- COMMISSION NOTICE on the implementation of food safety management systems covering prerequisite programs (PRPs) and procedures based on the HACCP principles (...) (2016/C 278/01)
- Annexe III – point 4.4.6.



“Where generic HACCP guides exist, documentation on hazard analysis, CCP determination, critical limit determination, possible modification of the FSMS and validation activities can substitute individual documentation on HACCP-based procedures.

Carrying out monitoring effectively is in general more important than recording it.”



Hazard identified in the Guide



Hazards identified as most significant for farmhouse and artisan cheese and dairy production

Chemical

- Allergens
- Antibiotics, other veterinary medicines and biocides

Physical

- Glass foreign bodies
- Metal foreign bodies

Microbiological

- *Brucella spp*
- *Mycobacterium bovis* and *M. tuberculosis*
- *Listeria monocytogenes*
- *Salmonella spp*
- Enterotoxins produced by Coagulase positive *Staphylococci*



Main principles of the Guide



Main principles of the Guide

- Key steps and CCPs
- Flexibility
- “Records” only if non conformity
- **Responsibility of the producer = the producer is the “skilled person”**
 - > No fixed standard plans or indicative values, in order to let the producer decide of his own practices



Key steps and Critical Control Points (CCPs)

852/2004, recital 15:

*“The HACCP requirements should take account of the principles contained in the Codex Alimentarius. They should provide sufficient flexibility to be applicable in all situations, including in small businesses. **In particular, it is necessary to recognize that, in certain food businesses, it is not possible to identify critical control points and that, in some cases, good hygienic practices can replace the monitoring of critical control points.** Similarly, the requirement of establishing ‘critical limits’ does not imply that it is necessary to fix a numerical limit in every case. In addition, the requirement of retaining documents needs to be flexible in order to avoid undue burdens for very small businesses”.*



Critical Control Points (CCPs) and Key Steps

- CCP: point/procedure/action to ‘reduce, eliminate or prevent the possibility of a safety hazard’
 - **Necessary to have parameter that can be controlled**
- Key steps: important steps to manage a hazard



Example of CCP: pasteurisation

- Specific **heat treatment for sanitary reasons**: inactivation of pathogens
- Specified time and temperature combination that has to be reached
 - e.g. LTLT: 63°C for 30 minutes
 - e.g. HTST: 72 °C for 15 seconds
- Needs to be monitored and recorded for each batch
- **Pasteurisation is the only CCP identified in the Guide**



CCP based on growth limits?

- It is not possible to **validate** a CCP (such as a target pH) as a means to control growth of a pathogen if the value stated in the **critical limit** is **higher** than the value required to prevent growth.
- Many cheese varieties and other dairy products will have pH values, ripening temperatures or water activity **exceeding** the minimum growth limits for these pathogens.
- Where a **validated** CCP cannot be identified, risk reduction may be better achieved through **good hygiene practices** at milk production level.



Key steps

- Important actions to **manage hazard**
 - Good Hygiene Practises
 - Good Manufacturing Practises
 - Preventive and corrective actions



Example of Key Steps

Enzymatic and mixed coagulation cheeses

Hazard: growth of pathogenic bacteria during acidification and drainage.

Key steps to manage this hazard:

- Ensure high standards in milk production
- Satisfactory acidification appropriate to the cheese variety



Example of Key Steps

Enzymatic and mixed coagulation cheeses

Checking / Monitoring procedure

- Organoleptic inspection

Example Gouda: correct draining of curds, correct drying of cheese rind

- Measurement of temperature, time and acidity development

Example Gouda: 5.5 hrs after addition of starter: $\text{pH} \leq 5.5$



Flexibility

‘To achieve the goal of food safety by alternative means depending on the specific circumstances or every establishment, region or foodstuff. ‘



How is 'flexibility' defined in the Guide?

'Flexibility' is decided by the producer:

- Flexibility on the HACCP-based procedures
- Interpretation of regulation ('where necessary', 'adequate', ...)

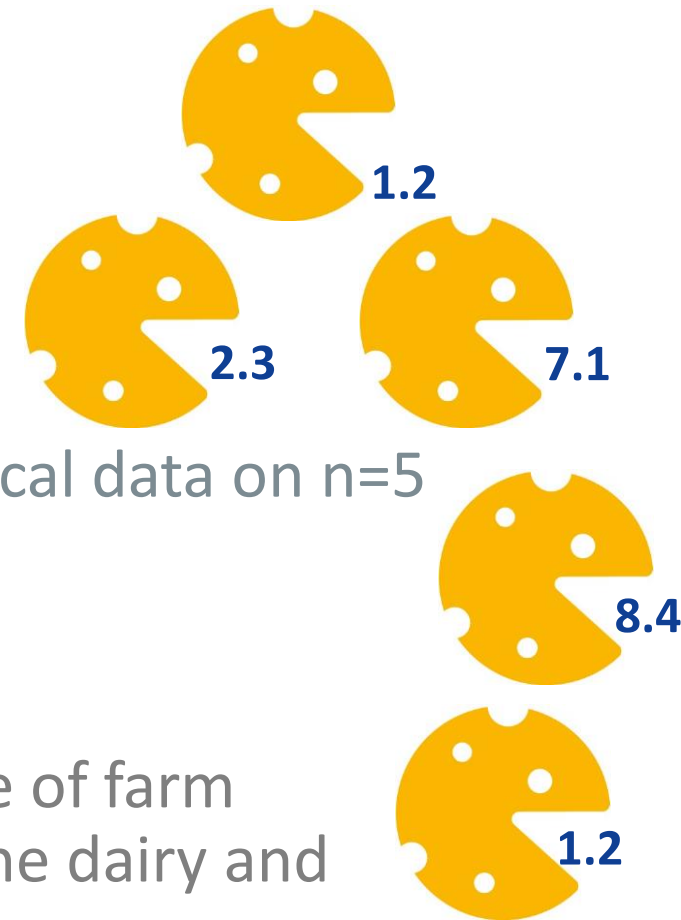
Flexibility granted by the Competent Authority :

- Derogation / exemptions
- Adaptations
- Exclusions



The ‘flexibility’ in the Guide

- Decided by the Food Business Operator:
 - See:
 - Section II- “premises and equipment”
 - Section VII – Self monitoring:
 - Frequency of sampling
 - Sampling of n=1 after a good historical data on n=5
 - Etc.
- Granted by Competent authorities:
 - See:
 - Section V - Milk production and storage of farm
 - Section V - Milk collection, storage in the dairy and treatment





How can a producer apply flexibility?

- Flexibility may be decided by the producer: no need to request it
- Flexibility may be granted by the competent authority:
 - Individually
 - Collectively:
 - Through an association of producers, PDO, etc
 - Depending of countries, the request should be done at local, national or regional level.



How should producers use the Guide?



How « to personalise » the GGHP?

- ▶ **Step 1:** The producer should take only the sheets useful for him
- The GGHP is made of separate sheets > the user can select only the sheets related to his products and practices
- *For example, a producer processing his own cow milk into lactic cheeses need only keep:*
 - *All the GHP and the GMP sheets*
 - *The sheet « risk analysis for primary production »*
 - *The HACCP-based plan « lactic coagulation cheeses »*
 - *The sheets related to traceability ; self monitoring and non conformity management*



How « to personalise » the GGHP?

► Step 2: The producer should adapt THE GHP & GMP to his practices

In each sheet, the producer should:

- Delete the points of the sheet that are not applicable to his practices
- Keep the recommendations that can suit with his practices, and even highlight and detail those that are most relevant for him



Example of personalising one GHP sheet

Section II - Good Hygiene Practices STAFF: GENERAL HYGIENE, TRAINING, HEALTH

Hazards posed by food handlers are easily controlled through simple good hygiene practices and the limited risk posed by the small number of personnel typically working in a small dairy/food production business may allow for some flexibility in the interpretation of regulatory requirements. These hygiene requirements apply to all food handlers – either working alone or with others.

General Hygiene for any Food Handler

Effective handwashing with soap and water is the principal means of infection control in a food production business. Fingernails should be clean and unvarnished and false fingernails should not be worn. Care should be taken to wash the thumbs and between the fingers. Arms should also be washed where they will come into contact with food. In the case of outdoor milking where water is not available, hand-gel or wipes can be used. However, hands should be sanitised by washing with soap and water at the next opportunity.

Staff should wash their hands:

- ~~Before milking animals.~~
- Upon entering the food production area.
- Before handling food or ingredients or starter cultures.
- After going to the toilet.
- After using the phone.
- After handling potentially contaminated material.
- Whenever they are dirty.



Staff should, through their behaviour and practices, seek to avoid contamination and cross-contamination of products. In particular:

- Cuts and abrasions should be covered with a waterproof dressing or glove.
- Food handlers should refrain from smoking, spitting, chewing or eating.
- Food handlers should avoid sneezing or coughing over food products.
- Jewellery should not be permitted in production areas though sometimes exceptions are made e.g. for a plain wedding band or small earrings.
- Where accidental release may pose a risk of contamination, allergens (including cereals containing gluten, crustaceans, molluscs, eggs, fish, peanuts, nuts, soybeans, celery, mustard, sesame, lupin and sulphur dioxide) should not be brought into the food-handling area unless as a declared ingredient.

Clothing

Staff should wear designated clothing for milking and clean clothes for food production; clothes worn in the dairy should not be the same ones worn for working on the farm. A change of outer clothing (overcoats or aprons) should be provided when entering the food production area and should be removed before leaving the premises or going to the toilet. Clothing should be in good condition - free from rips, fraying and loose buttons.

~~A change of footwear (or a footbath) should be provided when required to prevent dirt being brought into the dairy.~~ Where a disinfectant footbath is used, the contents should be refreshed regularly to ensure their effectiveness.



Training

All food handlers and milking staff should be trained; this may be by obtaining a formal food hygiene qualification or through direct instruction by a more experienced colleague. Training should address the food safety hazards encountered in dairy production and promote understanding of good hygienic practice.



This sentence says: *“Staff should wash their hands: before milking animals....”*

> A cheesemaker not producing milk, will **delete** *“before milking animals”* in his GGHP



This sentence says: *“[about training] this may be by obtaining a formal food hygiene qualification or through direct instruction by a more experienced colleague”*

> The producer should **circled** *“through direct instruction by a more experienced colleague”* if it is the usual practice in his business.

NB: in the case when formal training has been done by some members of the “staff”, certificates can be joined in appendix of the GGHP, as supporting documents

For the rest, provided that the text is in line with his practices, the producer has nothing to add, to delete nor to adapt.





Example of personalising a HACCP-based plan

Extract of the HACCP-based plan « lactic coagulation cheeses »

Process step to monitor	Why do we have to be careful?	Preventive actions	Checking/Monitoring procedure	Corrective actions
Maturation without inoculation	M: Growth of pathogenic bacteria: Milk can contain undesirable bacteria. When the number of lactic acid bacteria (LAB) is low or conditions for their development are unfavourable, pathogenic bacteria can dominate	Where possible, promote the development of LAB through good animal husbandry (see sheet milk production). Use proper maturation temperature and time to promote sufficiently rapid growth of LAB. (2)	Experience of cheesemaker: organoleptic inspection, measurement of temperature, time and acidity development.	Add dose of acidifying culture. Reject suspect milk (taste, smell, appearance). Adjust production parameters (time, temperature). If it is a recurrent issue, improve milk production practices or change milk supplier.
Maturation with inoculation	M, C: Improper process parameters can allow growth of pathogenic bacteria	Maintain correct temperature, time and dose of cultures. Add cultures as soon as possible. <i>Evening milking: Whey added in the tank just after milking Tank's temperature adjusted at 12°C ...</i>	Experience of cheesemaker: organoleptic inspection, measurement of temperature, time and acidity development.	Adjust production parameters: time, temperature, type and dose of cultures.

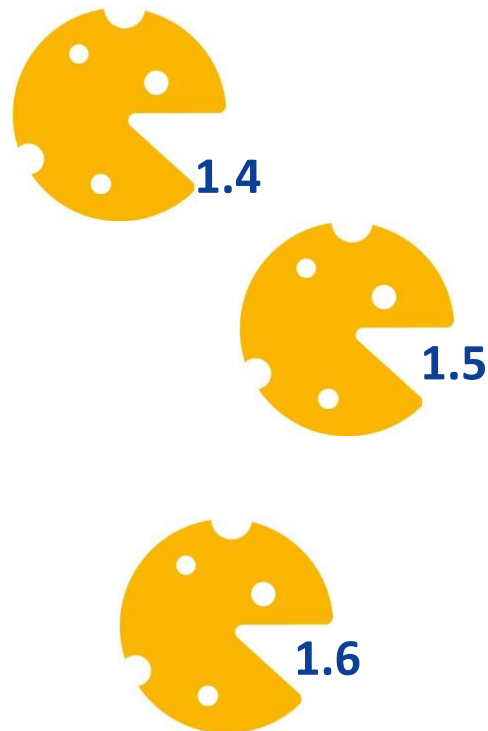
If the producer doesn't use maturation without inoculation, he has to **delete** this row

The line is **kept and adapted** (detailed, ...) because it is the usual practice of this producer...



Other examples of personalisation

- Add a file with relevant descriptions, forms and examples and personalised HACCP based plans.

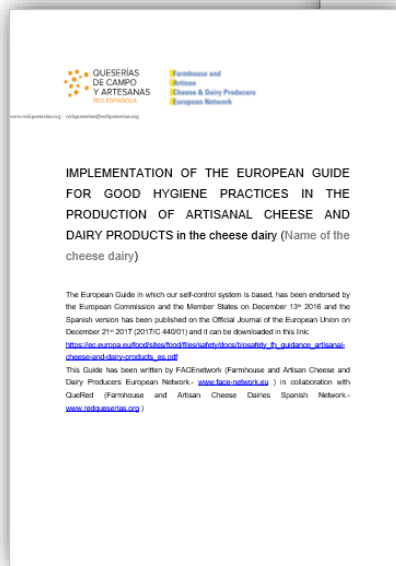




Tools available for this section



- 1.1 Power Point HACCP principles & the Guide
- 1.2 Power Point on Flexibility and adaptations
- 1.3 Example of Personalisation 1
- 1.4 Example of Personalisation 2
- 1.5 Example of Personalisation 3
- 1.6 Example of Personalisation 4



Example of Personalization


Section II – Good Hygiene Practises
Mark the appropriate boxes

Staff: general hygiene, training, health
thing
☐ Footbath is used
☐ Change of footwear is used

Training
☐ Formal food hygiene qualification
☐ Direct instruction by more experienced colleague

Cleaning
Choice of detergents
☐ Alkaline
☐ Neutral
☐ Acid
☐ Enzymatic

Choice of additives
☐ Wetting agent
☐ Chelating agent
☐ Foaming agent
☐ Disinfectant
☐ Other.....
☐ None

 **Example of personalising a HACCP-based plan**
Extract of the HACCP-based plan « lactic coagulation cheeses »

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Maturation with inoculation	M, C- Improper process parameters can allow growth of pathogenic bacteria	Maintain correct temperature, time and dose of cultures. Add cultures as soon as possible. Evening milking: whey added in the tank just after milking Tank's temperature adjusted at 12°C	Experience of cheesemaker: organoleptic inspection, measurement of temperature, time and acidity development.	Adjust production parameters: time, temperature, type and dose of cultures.

If the producer doesn't use maturation without inoculation, he has to **delete** this row

The line is kept and adapted (detailed, ...) because it is the usual practice of this Producer...

Teacheasy

Farmhouse and Artisan Cheese & Dairy Producers European Network

Erasmus+

