

INTERNATIONAL CHEESE TECHNOLOGIES

WHITE CHEESES: Quark/ Tvarog, Cottage cheese, Feta-Like, Mozzarella/Burrata/Ricotta, Halloumi/Paneer.

TRAINING N°30 - 2025

EXPERTISE LEVEL

GENERAL INFORMATION

Date: from 6 oct (08:00) to 10 oct 2025 (17:00). Week 41

Duration: 5 days - 35 hours

Referent trainer: Jamal KEBCHAOUI

referent trainer and experienced on the subject

Price: € 2 440 excluding tax

excluding meals and accommodation **Location**: ENILEA Campus Mamirolle

Grande rue - 25620 MAMIROLLE FRANCE

INFORMATION AND REGISTRATION

ENIL: ENILEA Campus Mamirolle 25620 Mamirolle

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PUBLIC AND PREREQUISITES

Manufacturing and R&D Managers (technical supervision): Engineers, Technologists, Cheesemakers

- Basic knowledge of food science at Bachelor and Master degrees.
- Mastery of the general principles of dairy/cheese technologies, additives and manufacturing aids.
- Knowledge of the descriptors and technological levers used in cheese technology.

Remarque : Le dispositif de FOAD / e-learning : Webalim $^{\text{TM}}$ peut être mis en œuvre pour acquérir ces pré-requis ou compléter les apports théoriques en amont ou en aval de ce stage.



CONDITIONS OF IMPLEMENTATION

In the event of an insufficient number of trainees, ANFOPEIL reserves the right to cancel or postpone the training. The information is then transmitted at the latest 10 working days before the start date of the training.

METHODS AND TEACHING MEANS

The course is led by two trainers, members of the Applied Research Department of ENILEA Campus Besançon-Mamirolle.



This training will alternate technical contributions, practical work in a cheese workshop and supervised work (Production analyses).

EDUCATIONAL OBJECTIVES

The main objectives defined for this training are:

- 1. The discovery of the wide range of "white cheese" technology on the characteristics of composition, protein structure, texture and functional or organoleptic properties expected on the marketed products.
- 2. The identification of the parameters to be controlled during the process.
- 3. Understanding the management of technological levers to achieve these characteristics (friable vs. elastic textures, suitability or not for stringing, spreading, etc.)
- 4. The discovery of new technological options (manufacturing without draining, fermentative acidification vs. direct acidification, "rennet" coagulation vs. thermo-coagulation, etc.)

At the end of the training, trainees should be able to:

- Characterize the following cheeses: Quark, Cottage cheese, Soft Mozzarella / Ricotta, Feta -Like, Halloumi / Anari, Paneer.
- Evaluate the quality of raw materials and inputs to be implemented.
- Present the technological processes and the impact of each step on the physicochemical, microbiological and organoleptic characteristics of the different cheeses studied.
- Reproduce on an experimental scale, each of the technologies studied.

ORGANIZATION AND TRAINING CONTENT

Organization: 40% of training time, in the classroom, on process studies and

60% of the remaining time on manufacturing in the technology hall.

Content:

Introduction on each product:

- ✓ Definition and general and historical presentation.
- ✓ Physicochemical, microbiological, organoleptic and nutritional characterizations,
- ✓ Functional properties potentially expected,
- ✓ Economic data, markets/opportunities.

Process analyses on each technological step concerned.

- ✓ Milk preparation: Standardization (Fat, Protein, pHr), Heat treatments (objectives and limits), Maturation (specificities of lactic fermentation)
- ✓ Coagulation (implementation methods and definition of objectives)
- ✓ Work in vat (cutting /stirring / scalding /heating)
- ✓ Salting, Packaging,
- ✓ Technical and economic assessment of the process.
- ✓ □ Main defects : Main causes and proposed corrections.

Specifics: Quarg /Tvarog/ Cottage:

- ✓ The different manufacturing methods: With and without draining.
- ✓ Control of the demineralization on coagulum (lactic coagulation)
- ✓ Study of the different draining methods.
- ✓ Description of equipment that can be used.

Specifics: Feta-Like/Salad Cheese:

- ✓ Cheese or analogue,
- ✓ The different manufacturing methods: With and without draining.
- ✓ Functional properties and "maturations"

Fresh Mozzarella (Soft) / Burrata specificities:

- ✓ Mozzarella di Bufala vs. Mozzarella made from cow's milk,
- √ Fermentative or citric mozzarella
- ✓ Explanation of stretching phenomenon
- ✓ Driving of water or steam stretchings

Specificities of whey cheeses, Ricotta:

- ✓ Characteristics of the mixes before heating and flocculation
- ✓ Control of proteins acid thermo-coagulation (technological levers).

Halloumi / Paneer Specificities:

- ✓ Two cheeses with high culinary use
- ✓ Loss of any ability to melt/spread but should brown when cooked.

Training summary and assessment

Remember to list your questions related to this training course in advance, the trainers will be able to answer them.

Possible organization within the company, contact us.

EVALUATION METHODS

The trainees' acquired knowledge at the end of the internships is systematically assessed using knowledge questionnaires or interviews with the trainer or practical exercises. The method implemented depends on the theme and the course of the training (theory and/or practice).

TRAINING VALIDATION

A certificate of completion of training and a certificate of completion are sent to the trainee and/or their company.