



Australian Government

Assessment Requirements for FBPCHE5003 Produce a range of rennet-coagulated cheeses

Release: 1

Assessment Requirements for FBPCHE5003 Produce a range of rennet-coagulated cheeses

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceutical Training Package Version 2.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has safely and effectively overseen the production of at least two different rennet-coagulated cheeses, including:

- sampling fresh milk and analysing results
- preparing milk for cheese making
- carrying out standardisation and pasteurisation procedures
- adjusting milk to renneting temperature and monitoring temperature
- adding optional additives to influence flavour, colour and texture during ripening
- adding starter for acidification by lactic acid or acid for direct or part-acidified milk for cheese making
- adding rennet to promote coagulation
- testing readiness of curd for cutting
- using stainless steel wire or nylon line knives to cut the curd into small particles
- carrying out agitation and optional cooking procedure
- carrying out cheese washing procedures, appropriate to type of cheese
- carrying out drainage operations
- carrying out further curd treatment, depending on the cheese type
- carrying out salting or brining process
- managing process control for moisture, pH, calcium phosphate levels, microbiology, texture and flavour in rennet-coagulated cheese making
- carrying out sampling for chemical and microbiological testing of cheese
- managing ripening process for rind cheeses, mould-ripened cheeses and bacterial surface ripened cheeses for optimum quality
- assessing rennet-coagulated cheeses for organoleptic qualities
- conducting tests for pH, moisture and salt levels in cheese
- maintaining records for cheese making
- developing operating procedures for the cheese making process.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the common processes for making different types of rennet-coagulated cheeses, including:
 - pasta filata
 - eye cheese
 - cheddar
- the main components of milk and cheese (both curds and whey)
- types and impact of inhibitory substances in milk, including bacteriophage
- specifications of product at each stage of rennet-coagulated cheese making
- milk preparation for cheese making (standardisation and pasteurisation)
- types of starters used and their role in the fermentation process
- types of adjunct cultures and their role in the flavour and texture characteristics of the ripened cheese
- use of additives to the milk for modifying the flavour, texture and colour of the ripened cheese
- use of bacterial cultures and coagulating enzymes
- processes of coagulation and syneresis and their role in rennet-coagulated cheese making
- critical control points in the manufacture of each cheese type
- principles of brine salting and maintenance of brine salting systems for brine salted cheeses
- principles of dry salting for dry salted cheeses
- effects of pH and temperature on cheese processing performance and product quality
- lactic acid bacteria and their role in cheese making
- microbial contaminants of cheese (lipolytic bacteria, yeasts, moulds, bacillus, listeria, Escherichia coli, salmonella, coliforms and staphylococci) and their impact on cheese quality
- sampling and testing procedures
- yeasts and moulds and other microorganisms of significance in cheese making
- contamination/food safety risks associated with the process, and related control measures
- techniques used to monitor the cheese making process, such as inspecting, measuring and testing
- common causes of variation and corrective action required for each cheese making process
- organoleptic properties and their relationship to process control and ingredients in cheese making
- contamination risk of inoculants and contaminants
- food safety and quality assurance standards and procedures
- yield efficiency
- aseptic conditions and techniques for cheese making
- cleaning and sanitation procedures in line with Australian Standards for cleaning in the dairy industry

- routine maintenance procedures for cheese making equipment
- product/batch changeover procedures
- work health and safety hazards and controls
- procedures for recording production and performance information
- environmental issues and controls relevant to the process, including waste collection and handling procedures
- Food Standards Code
- state/territory, Commonwealth and industry requirements relevant to food processing.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a workplace setting or an environment that accurately represents a real workplace
- resources, equipment and materials:
 - ingredients, production process and related equipment for rennet-coagulated cheese
 - sampling and testing equipment and procedures
 - food safety related information, including milk counts and cheese bacterial counts for milk used
- specifications:
 - manufacturers' advice and product specifications.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guides are found in VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>