

Modification history

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceutical Training Package Version 3.0.

FBPCH5XX1	Produce lactic acid coagulated artisan cheese
Application	<p>This unit of competency describes the skills and knowledge required to produce lactic acid coagulated soft cheese in an artisan cheese making environment.</p> <p>This unit applies to cheesemakers who have responsibility for overseeing the production of cheese, adapting the process where required to suit the specified outcome, and complying with workplace health and safety, food safety, recordkeeping and quality assurance requirements for the cheese making process.</p> <p>No occupational licensing or certification requirements apply to this unit at the time of publication. However, legislative and regulatory requirements for food processing exist, so local requirements must be checked. All work must comply with Australian food safety standards and relevant codes of practice.</p>
Prerequisite Unit	Nil
Unit Sector	Cheese (CHE)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for cheese making	1.1 Identify hazards and manage risks associated with producing cheese 1.2 Sanitise or pre-ripen a container of starter culture under aseptic conditions 1.3 Ensure all surfaces meet cleanliness and sanitation requirements 1.4 Manage stringent hygiene and quarantine procedures throughout cheese making 1.5 Record cheese production information according to workplace procedures 1.6 Determine type of lactic acid coagulated cheese to be produced
2. Prepare milk	2.1 Sample raw or pre-pasteurised milk and analyse composition 2.2 Confirm outcome of the cheese making process, based on milk composition 2.3 Standardise milk for consistent outcome, as required
3. Inoculate milk to promote coagulation	3.1 Add lactic culture to the milk and mix evenly according to cheese type and recipe 3.2 Add coagulating enzymes to the milk according to recipe 3.3 Maintain temperature throughout the tank or vat according to recipe 3.4 Maintain a log of pH and temperature to control ripening and yield
4. Process curds	4.1 Manage curd breaking or cutting to meet specified outcome 4.2 Plan the curd processing schedule to meet specified outcome 4.3 Drain curd to ensure required pH level and consistency
5. Monitor and adjust cheese processing	5.1 Control the amount of moisture in cheese by regulating syneresis 5.2 Adjust calcium phosphate levels to influence basic cheese structure if required 5.3 Control texture of the cheese by regulating pH, ripening agents, salt, moisture and fat 5.4 Control cheese flavour through choice of ingredients, such as milks, cultures, coagulating agents and salt, and pH levels 5.5 Optimise yield by refining process control parameters

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
6. Manage ripening	6.1 Manage ripening agents to cheeses as required 6.2 Optimise curing by planning for and adjusting the key composition ratios of acid-coagulated soft cheeses 6.3 Use surface treatments according to cheese type and recipe 6.4 Maintain records of cheese production and ripening, as specified by legislation

Foundation Skills	
<i>This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.</i>	
Skill	Description
Numeracy	<ul style="list-style-type: none"> Accurately weigh and measure ingredients for cheese making Sample cheese to analyse pH, fat, moisture and salts Calculate cheese yields
Get the work done	<ul style="list-style-type: none"> Adjust processing parameters and problem solve issues as they arise

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCHE5XX1 Produce lactic acid coagulated artisan cheese		New unit	No equivalent unit

Links
Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4

TITLE	Assessment requirements for FBPCHE5XX1 Produce lactic acid coagulated artisan cheese
Performance Evidence	
<p>An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.</p> <p>There must be evidence that the individual has produced at least one type of lactic acid coagulated cheese, on two different occasions, with consistent texture, colour, finish and flavour.</p>	

Knowledge Evidence	
<p>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:</p> <ul style="list-style-type: none"> • the main types of lactic acid coagulated cheeses • the chemical composition of bovine and non-bovine milks and components important in cheese making • the main components of milk and cheese (both curds and whey) • types and impact of inhibitory substances in milk, including bacteriophage • specifications of cheese product at each stage of making • milk preparation for cheese making • types of starters and adjuncts used and their role in the fermentation process • typical bacterial cultures and the flavours and textures they produce • moisture control in cheese making • processes of coagulation and syneresis and their role in cheese making • curd size and its impact on moisture • effects of pH and temperature on cheese processing performance and product quality • microbial contaminants of cheese (lipolytic bacteria, yeasts, moulds, bacillus, listeria, Escherichia coli, salmonella, coliforms and staphylococci) and their impact on cheese quality • contamination risk of inoculants and contaminants • yeasts and moulds and other microorganisms of significance in cheese making • temperature and humidity requirements for curing • ripening agents for lactic acid coagulated cheeses • 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 of lactic acid coagulated cheeses and their relationship to processes and ingredients in cheese making • sampling and testing procedures for microbes • sampling procedures for cheese making • food safety and quality assurance standards and procedures • cleaning and sanitation procedures for cheese making • workplace 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 in relation to dairy processing • state/territory, Commonwealth and industry requirements relevant to food processing. 	

Assessment Conditions	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> • physical conditions: <ul style="list-style-type: none"> • skills must be demonstrated in a workplace setting or an environment that accurately represents a real food processing workplace • resources, equipment and materials: <ul style="list-style-type: none"> • cheese making ingredients and production process equipment • sampling and testing equipment and procedures. 	

Assessment Conditions

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