

Modification history

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

FBPCHE3002	Carry out processes for a range of artisan cheeses
Application	<p>This unit of competency describes the skills and knowledge required to carry out artisan cheese making processes.</p> <p>This unit applies to individuals who work in small scale cheese production enterprises and use discretion and judgement in their work.</p> <p>All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.</p> <p>No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.</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 to work	1.1 Organise the work tasks to be completed 1.2 Identify workplace health and safety hazards, assess risks and implement control measures 1.3 Identify and address food safety and quality non-compliance issues according to legislative requirements 1.4 Select and use appropriate personal protective equipment
2. Apply sanitation procedures	2.1 Ensure the storage area for starter cultures is maintained according to workplace hygiene practices 2.2 Keep all surfaces and equipment clean and sanitised according to workplace sanitation procedures 2.3 Ensure raw milk is kept separate from pasteurised milk operations 2.4 Record food safety related information according to workplace food safety standards
3. Implement procedures to prepare milk for cheese making	3.1 Carry out clarification procedures for raw milk, if required 3.2 Implement standardisation procedures for milk to be processed into cheese 3.3 Carry out pasteurisation procedures for milk, if required
4. Carry out procedures to inoculate milk and cut the curd	4.1 Add inoculants and adjuncts to milk and allow it to ripen to specification 4.2 Measure rennet accurately and dilute before adding to milk 4.3 Maintain temperature at specified level according to the production requirements 4.4 Test curd for readiness to cut according production testing procedures
5. Implement procedures to separate, cook and wash the curd	5.1 Carry out curd cutting according to production procedures 5.2 Test whey for pH or acidity, temperature and fat levels to ensure curd cutting efficiency 5.3 Ensure optimal syneresis according to cooking schedule and curd stirring requirements 5.4 Carry out draining and washing procedures to ensure curd is at required moisture, pH level and consistency

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. Carry out fermentation, salting and optional pressing treatments	6.1 Transfer curd to hoops to form the correct shape for the type of cheese 6.2 Maintain temperature profile required for the cheese type to complete fermentation 6.3 Add salt after draining according to cheese type 6.4 Apply salting treatments according to cheese type 6.5 Press dry salted cheese in hoops according to cheese type
7. Implement cheese curing and packaging procedures	7.1 Apply maturing requirements according to cheese type 7.2 Monitor the maturing environment according to the cheese type 7.3 Apply ripening agents to cheese according to requirements of cheese type 7.4 Carry out packaging and labelling procedures either before or after maturing according to cheese type and workplace requirements
8. Assess the organoleptic properties of cheese and relate to specifications	8.1 Check that flavour meets specifications for the cheese type 8.2 Examine the texture of cheese and compare to specifications 8.3 Examine cheese for evenness of colour and finish according to specifications 8.4 Identify possible causes of out of specification results and make changes to procedures to address quality issues for future cheese production
9. Meet workplace requirements for food safety, quality and environmental management	9.1 Keep records of cheese manufacture according to workplace procedures 9.2 Dispose of waste according to workplace environmental and waste management procedures 9.3 Review the environmental impacts of the cheese making operation and identify opportunities for improvement

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
Reading	<ul style="list-style-type: none"> Interprets cheese making procedures and specifications from a variety of sources
Writing	<ul style="list-style-type: none"> Completes organisational documentation in required format
Numeracy	<ul style="list-style-type: none"> Interprets and manipulates numerical information for volumes, weights and measures of ingredients Performs mathematical calculations for sample tests and interprets results
Navigate the world of work	<ul style="list-style-type: none"> Follows workplace procedures and legislative requirements Identifies and implements changes needed to procedures
Get the work done	<ul style="list-style-type: none"> Plans and completes tasks in correct sequence for effective cheese making outcomes Makes decisions directly related to completion of cheese making tasks

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCHE3002 Carry out processes for a range of artisan cheeses	FDFCH3002A Carry out processes for a range of artisan cheeses	Updated to meet Standards for Training Packages Minor changes to performance criteria for clarity	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
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TITLE	Assessment requirements for FBPCHE3002 Carry out processes for a range of artisan cheeses
Performance Evidence	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has prepared at least two separate batches of different artisan cheese types and demonstrated the following points for each batch:</p> <ul style="list-style-type: none"> • followed required food safety, hygiene, health and safety, quality and environmental management procedures • prepared milk for cheese making • inoculated and ripened milk to produce coagulate according to cheese type • prepared the curd by, cooking, cutting, draining, salting and pressing according to type of cheese • treated the cheese for maturing according to cheese type • packaged and labelled artisan cheeses according to product requirements • maintained records according to workplace and legislative requirements. 	
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 the purpose and basic principles of cheese making, including:</p> <ul style="list-style-type: none"> • main cheese types and their characteristics, and the common processes for making the different cheese types • main components of milk and cheese (both curds and whey) • milk characteristics and components important in cheese making • milk preparation for cheese making including when standardisation and pasteurisation are required • effect of milk quality on cheese processing performance • types and impact of inhibitory substances in milk • types of starters used and their role in the fermentation process • moisture control in cheese making • processes of coagulation and syneresis and their role in cheese making • effects of acidity (either pH or titratable acidity) and temperature on cheese processing performance and product quality • role of yeasts, moulds and adjunct cultures in cheese making • temperature and humidity requirements for maturing • ripening agents for different cheese types • contamination/food safety risks associated with the process and related control measures including: <ul style="list-style-type: none"> • microbial contaminants of cheese (lipolytic bacteria, yeasts, moulds, bacillus, listeria, E. coli, salmonella, coliforms and staphylococci) and their impact on cheese quality • the impact of bacteriophage in fermentation and ripening • contamination risk of inoculants and other contaminants • techniques used to monitor and sample during the cheese making process for quality control, including: <ul style="list-style-type: none"> • inspecting • measuring • testing • common causes of variation and corrective action required for each cheese making process • organoleptic properties and their relationship to processes and ingredients in cheese making • work health and safety hazards and controls • procedures for: <ul style="list-style-type: none"> • routine maintenance • product/batch changeover • hygiene, cleaning and sanitation in line with best manufacturing practice • food safety and quality assurance in line with the Food Standards Code • environmental issues and controls, including waste collection and handling procedures • procedures and responsibility for recording, reporting production and performance information and records required, including: 	

Knowledge Evidence	
<ul style="list-style-type: none">• measurements for timing of operations• temperature• milk and curd acidity• curd weight• hooped yield• maturing data.	
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">• a workplace or an environment that accurately reflects performance in a real workplace setting• resources, equipment and materials:<ul style="list-style-type: none">• production process and related equipment for making artisan cheeses• sampling and testing equipment and procedures• specifications:<ul style="list-style-type: none">• manufacturers advice and operating procedures for cheese making equipment• methods for collecting data and calculating yields, efficiencies and material variances appropriate to the type of cheese and the production environment. <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
Links	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4