



Australian Government

FBPCHE3001 Conduct cheese making operations

Release: 1

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Modification History

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

Application

This unit of competency describes the skills and knowledge required to carry out cheese making in a bulk packaging operations using an integrated industrial process under the direction of the cheese manufacturing manager.

This unit applies to individuals working as advanced operators in industrial cheese enterprises who take responsibility for their own work. It does not include milk preparation processes or cheese curing, portioning or retail packaging processes.

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.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Cheese (CHE)

Elements and Performance Criteria

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 food safety and quality non-compliance issues and report

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	to supervisor 1.4 Select and use appropriate personal protective equipment
2. Monitor milk supply and quality	2.1 Ensure the availability of milk supply for batch according to product specifications 2.2 Check the sample data on milk for composition, homogeneity, somatic cell count and disk assay according to specification 2.3 Maintain milk at temperature required for inoculation with the culture according to recipe and specifications
3. Prepare cheese making equipment and add ingredients	3.1 Ensure ingredients are available to meet product requirements 3.2 Measure ingredients to meet recipe requirements 3.3 Handle ingredients safely and according to procedures to maintain purity and viability 3.4 Ensure equipment is ready for use according to operating procedures and safety requirements 3.5 Set and operate cheese making equipment to meet specified requirements 3.6 Load ingredients into the plant at the required stage 3.7 Check the final mix against specifications
4. Carry out process control and make adjustments according to operating procedures	4.1 Implement equipment start-up and shutdown according to safety requirements and operating procedures 4.2 Identify and report equipment faults 4.3 Monitor cheese making processes taking required samples according to workplace procedures 4.4 Carry out routine tests and record results according to workplace procedures 4.5 Check cheese for food safety and quality requirements 4.6 Identify, rectify and report out of specification cheese 4.7 Package cheese for curing and distribution with correct batch number attached 4.8 Clean equipment to meet production and hygiene requirements after each batch
5. Record and review	5.1 Monitor cheese yields and compare to standards

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
cheese making process	5.2 Review environmental practices and safety standards used in the process 5.3 Maintain workplace records according to workplace procedures

Foundation Skills

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.

Skill	Description
Reading	Reads and interprets recipes, operating procedures, specifications, and other documentation from a variety of sources and consolidates information to determine production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling and terminology when reporting and maintaining production records
Numeracy	- Interprets and manipulates numerical information for weights and measures relating to cheese recipes - Performs mathematical calculations for sample tests and interprets results to determine action
Oral communication	Clearly explains detailed information using language, tone and pace appropriate to audience when reporting to supervisor
Navigate the world of work	- Takes full responsibility for following policies, procedures and standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Uses a range of strategies to establish a sense of connection and build rapport with co-workers
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices related to environmental practices and safety standards.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCHE3001 Conduct cheese making operations	FDFCH3001A Coordinate cheese making operations	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.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCHE3001 Conduct cheese making operations

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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 completed all parts of the cheese making process to produce at least one cheese product, including:

- checking, mixing and adding ingredients for cheese making according to recipe and production requirements
- operating, monitoring and adjusting cheese making equipment to meet production requirements and in accordance with safety procedures
- sampling and testing cheese during development and adjusting equipment, ingredients or timing according to procedures and recipe
- preparing and packaging cheese for curing and distribution
- applying food safety policies and procedures to work practices
- reviewing the cheese making process and maintaining records according to workplace procedures.

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:

- purpose, basic principles and processes of cheese making including:
 - the main components of milk and cheese (both curds and whey)
 - milk characteristics and components important in cheese making
 - milk preparation for cheese making (fat and protein standardisation, and pasteurisation)
- types of starters used and their role in the fermentation process
- effect of milk characteristics on cheese processing performance
- use of coagulating enzymes to initiate the syneresis process
- use of adjunct cultures

- moisture control in cheese making
- organoleptic properties of cheese and their relationship to processes and ingredients in cheese making
- effects of pH and temperature on cheese processing performance and product quality
- types and impact of inhibitory substances in milk
- cheese making equipment and operations including:
 - equipment start-up, shutdown and emergency procedures
 - quality characteristics to be achieved by a cheese making process
 - operation and routine maintenance requirements of cheese making and packing plant and equipment
 - operational procedures for operating the cheese making process, including adding ingredients, testing, measuring and recording, and making limited adjustments to ingredient recipes or the operation of equipment according to procedures
 - work health and safety hazards and controls
- common causes of variation and corrective action required for each stage of the cheese making operation including:
 - microbial contaminants of cheese (lipolytic bacteria, yeasts, moulds, bacillus, listeria, E. coli, salmonella, coliforms and staphylococci) and their impact on cheese quality
 - impact of bacteriophage on the fermentation process
 - sampling and testing procedures for contaminant microbes
 - contamination risk of inoculants and contaminants
 - food safety risks associated with the process and related control measures
 - sampling and testing procedures for cheese quality
- packaging procedures
- product/batch changeover procedures
- line responsibility for reporting production and performance information
- cleaning and hygiene management of cheese making including:
 - food safety and quality assurance standards and procedures
 - hygiene, cleaning and sanitation procedures in line with best manufacturing practice
 - Food Standards Code
 - routine maintenance procedures
- environmental issues and controls relevant to the process, including waste collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately reflects performance in a real workplace setting
- resources, equipment and materials:
 - cheese making production process and related equipment

- equipment operating procedures including control points and process settings
- sampling and testing equipment and procedures
- recording systems to meet food safety and quality assurance requirements
- cheese making consumables
- personal protection equipment and material safety data sheets (MSDS)
- cleaning procedures, materials and equipment
- specifications:
 - workplace procedures, including safe work practices, food safety, quality, and environmental requirements
 - product specifications and recipes.

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

Links

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