



Australian Government

FBPFST5027 Implement and review the production of milk and related products by the membrane system

Release: 1

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Modification History

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

Application

This unit of competency describes the skills and knowledge required to implement the production of milk and milk products using a membrane system, and to review production standards and procedures for that process. The individual is required to use knowledge of food science and processes to determine the required food safety quality and performance of food production equipment.

This unit applies to individuals who are responsible for maintaining product safety, quality and efficiency in the dairy processing sector, and who exercise autonomy in undertaking complex work related to food product design, quality assurance and production management.

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.

Pre-requisite Unit

Nil

Unit Sector

Food science and technology (FST)

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. Plan and monitor the manufacturing of milk using a membrane	1.1 Identify quality and safety standards for milk products manufactured using a membrane system

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
system	1.2 Select appropriate production systems and the sequence of activity, and prepare the system for operation 1.3 Establish ingredients and resource requirements for production run 1.4 Interpret or develop a production schedule to ensure all resources and requirements are available and meet company requirements 1.5 Set the production system to operating specifications before and during production 1.6 Document data requirements for food safety, quality and production standards 1.7 Establish data collection points consistent with equipment capabilities and data requirements 1.8 Apply or develop procedures to deal with non-conformance in processes 1.9 Monitor process controls for the production of quality products
2. Diagnose, rectify and report problems arising from manufacturing of milk and related products by a membrane system	2.1 Determine and implement methods and systems to identify product defects in the preparation and production process 2.2 Implement a sampling plan for products 2.3 Conduct sensory analysis of products and analyse results 2.4 Identify and apply adjustments to processes and equipment based on test results 2.5 Report problems to designated person
3. Review production processes	3.1 Review the critical control points (CCPs) and critical limits for product safety 3.2 Review operating procedures for the food safety and quality of products 3.3 Review safe work systems for processing of products 3.4 Review the environmental impacts and energy efficiencies for processing

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	- Interpret food safety guidelines and regulations - Interpret product quality and workplace procedures
Oral communication	Use industry standard terminology
Numeracy	- Maintain and analyse data resulting from testing of products - Determine calibration procedures and schedule for test equipment
Navigate the world of work	Monitor adherence to legal and regulatory standards and responsibilities for self and others
Get the work done	- Monitor outcomes of decisions and identify key product quality system concepts and principles that may be adaptable to future situations - Use technology to access and monitor information, prepare reports, and to access and prepare relevant data

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFST5027 Implement and review the production of milk and related products by the membrane system	FDFST5027A Implement and review the production of milk and related products by the membrane system	Updated to meet Standards for Training Packages Minor changes to Performance Criteria to clarify intent	Equivalent unit

Links

Companion Volume Implementation Guides are found in VETNet: -

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

Assessment Requirements for FBPFST5027 Implement and review the production of milk and related products by the membrane system

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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 implemented and reviewed the production of one type of milk and one milk-related product, including:

- identifying and implementing the appropriate production system
- estimating the resource requirements for a specific order or run
- diagnosing, rectifying and/or reporting problems arising from the preparation and production using a membrane system
- implementing adjustments to process and equipment in response to test results
- carrying out product sampling and testing according to the critical control point (CCP)-based plan and operational procedures
- reviewing production 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:

- different types of milk and related products manufactured by a membrane system
- statutory compositional requirements for the different types of milk and related products manufactured by a membrane system
- the purpose of each process, and the principles of operation of equipment and accessories, for the preparation and production of different milk products
- production systems used by a membrane system
- operation of equipment and accessories used in the preparation and manufacturing processes
- critical factors in the preparation and production of milk and related products manufactured by a membrane system
- potential problems and product defects arising from a membrane system of manufacture

- formulation of milk and related products
- role of major ingredients found in milk and related products
- testing procedures for raw materials through to manufactured product
- sensory analysis techniques
- chemical and physical hazards that may affect milk and related products manufactured by a membrane system
- safe work procedures
- sanitation and hygiene procedures
- CCP principles and critical limits in a CCP program
- regulatory requirements associated with milk and related products manufactured by a membrane system
- environmental impacts of a membrane system.

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:
 - production process and related equipment, manufacturers' advice and operating procedures
- specifications:
 - tests used to report relevant product/process information and recorded results.

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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