# **Modification history**

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

FBPDPR2002	Operate a butter oil process
Application	This unit of competency describes the knowledge and skills required to set up, operate, monitor and shut down the components of a butter oil process. This process, also known as an anhydrous milk fat (AMF) process, is used for the preparation of butter oil from either cream or melted butter.
	This unit applies to individuals who apply basic operating principles to the operation and monitoring of butter oil equipment and processes in a dairy product production environment. Operators must be capable of operating a butter oil process using either cream or melted butter.
	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 apply to this unit at the time of publication.
Prerequisite Unit	Nil
Unit Sector	Dairy processing (DPR)

Elements	Performance Criteria
Elements describe the	Performance criteria describe the performance needed to demonstrate
essential outcomes.	achievement of the element.
Prepare the butter oil equipment and process for	1.1 Confirm materials and personal protective equipment are available for operating requirements
operation	1.2 Identify and confirm cleaning and maintenance requirements and status of high and low boil process equipment
	1.3 Fit personal protective equipment and adjust machine components and attachments needed for operating requirements
	1.4 Enter parameters required to meet safety and operating requirements
	1.5 Check and adjust equipment performance as required
	1.6 Conduct pre-start checks according to workplace requirements
2. Monitor the butter oil	2.1 Start up the butter oil process according to workplace procedures
process operation	2.2 Monitor equipment to identify variation in operating conditions
	2.3 Identify variation in equipment operation and report maintenance requirements
	2.4 Confirm that specifications are met at each stage
	2.5 Identify, rectify or report out-of-specification product or process outcomes
	2.6 Maintain the work area according to workplace guidelines, work health and safety, and food safety requirements
	2.7 Enter information in workplace records in required format
3. Shut down the butter oil	3.1 Identify the appropriate shutdown procedure
process	3.2 Shut down the process safety according to workplace procedures
	3.3 Identify and report maintenance requirements according to workplace procedures

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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.

performance in this drift of competency but are not explicit in the performance chema.		
Skill	Description	
Reading	Interpret and understand standard operating procedures for the butter oil process	
Writing	Complete records according to workplace guidelines in required format	
Numeracy	Monitor data for pressure, water flow and temperature	
Navigate the world of work	Understand main tasks, responsibilities and boundaries of own role, including use of personal protective equipment, hygiene and housekeeping standards and environmental care requirements	
Interact with others	Report operational and safety information using required communication method	
Get the work done	Follow workplace guidelines to address routine problems	

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
FBPDPR2002 Operate a butter oil process	FDFDP2002A Operate a butter oil process	Updated to meet Standards for Training Packages	No equivalent unit
		Prerequisites removed	

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 FBPDPR2002 Operate a butter
	oil process

## Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit. There must be evidence that the individual has set up, operated and monitored, and shut down at least one butter oil process using cream or melted butter, including:

- · safely conducted pre-start checks on machinery used for the process
- safely started, operated, monitored and adjusted butter oil process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- safely shut down equipment
- · applied food safety procedures to work practices
- followed work health and safety 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 and basic principles of each stage in the process, including an understanding of the stages, process flow and phases produced
- basic operating principles of equipment, including:
  - the principles of centrifuges and principles of evaporation
  - main equipment components
  - · status and purpose of guards
  - equipment operating capacities and applications
  - the purpose and location of sensors and related feedback instrumentation
- · services required for a butter oil process and action to take if services are not available
- the effect of outputs on downstream processes
- quality characteristics (fat content) to be achieved by the process
- quality requirements of in-feed materials (cream or butter) and the effect of variation in material quality on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
  - signs and symptoms of faulty equipment
  - · early warning signs of potential problems
- methods used to monitor the production process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- common causes of variation and corrective action required, including how earlier stages in the process could contribute to cloudy product
- contamination and food safety risks, and related control measures
- work health and safety hazards and controls
- isolation, lock out and tag out procedures and responsibilities
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
  - emergency and routine shutdowns
  - · procedures to follow in the event of a power outage
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste or rework collection and handling procedures related to the process
- cleaning and sanitation procedures for the butter oil process.

#### **Assessment Conditions**

Assessment of this unit of competency must take place under the following conditions:

### **Assessment Conditions**

- physical conditions:
  - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - personal protective clothing and equipment
  - butter oil and related equipment and services
  - · cream or butter to be processed
  - cleaning materials equipment and procedures
  - recording system or documents
- specifications:
  - work procedures, including advice on safe work practices, food safety, quality and documentation requirements
  - information on equipment capacity and operating parameters
  - production schedule and batch instructions
  - sampling schedules and test procedures and equipment
  - · documentation and recording requirements and procedures

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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	https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-
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