



Australian Government

FBPDPR3004 Operate and monitor a butter churning process

Release: 1

FBPDPR3004 Operate and monitor a butter churning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a butter churning process to produce sweet cream butter product to specification.

This unit applies to individuals who apply operating principles to the operation and monitoring of butter churning equipment and processes in a dairy product production environment.

All work must be carried out to comply with workplace procedures, in accordance with state/territory health and safety and food safety regulations, legislation and standards that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

Dairy Processing (DPR)

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 the butter churning equipment and process for operation	1.1 Confirm materials are available to meet production specification 1.2 Identify safety requirements and wear appropriate personal protective equipment, ensuring correct fit

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify food safety requirements for the task and product 1.4 Fit and adjust machine components and attachments needed for operating requirements 1.5 Enter parameters required to meet safety and operating requirements 1.6 Conduct pre-start checks according to workplace procedures
2. Operate and monitor equipment	2.1 Start up and operate the butter churning process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Adjust equipment operations to meet product specification 2.4 Take samples to confirm that product meets specifications 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace guidelines, health and safety, and food safety requirements 2.7 Maintain workplace records in required format according to workplace procedures
3. Shut down the butter churning process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to workplace procedures 3.3 Identify and report maintenance requirements according to workplace procedures 3.4 Clean equipment and dispose of waste in line with environmental requirements

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 standard operating procedures for the butter churning process

Skill	Description
Writing	• Complete processing records using digital and/or paper-based formats
Numeracy	• Read and monitor gauges and scales • Monitor agitation speeds, flow rates, temperature (°C) and weights (g, kg) for the butter churning process against production specifications

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPDPR3004 Operate and monitor a butter churning process	FBPDPR2001 Operate a butter churning process	Unit code and title updated to match complexity of task Minor changes to Performance Criteria to clarify task Foundation Skills refined Performance Evidence clarified Minor changes to Knowledge Evidence and Assessment Conditions	Equivalent

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 FBPDPR3004 Operate and monitor a butter churning process

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has operated and monitored a butter churning process to produce at least one batch of product to meet specifications, including:

- applying food safety procedures to work practices
- following safe work procedures
- taking corrective action in response to typical faults and inconsistencies.

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 the butter churning process, including product preservation and the types of additives and ingredients used in the process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- the flow of the butter churning process and the effect of product output on downstream processes
- quality characteristics to be achieved by the butter churning process
- contamination/cross-contamination and food safety risks associated with the process, and related control measures
- good manufacturing practices (GMP) relevant to work task
- Food Standards Code requirements for the production of butter
- the effect of raw material characteristics on the butter churning process

- 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
- techniques used to monitor the butter churning 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
- health and safety hazards and controls relevant to butter churning process
- 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
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for butter churning equipment
- cleaning and sanitisation procedures for butter churning equipment
- procedures to record traceability of product and ingredients.

Assessment Conditions

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

- physical conditions:
 - a dairy processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - butter churning process and related equipment and services
 - ingredients for the butter churning process
 - cleaning materials, equipment and procedures
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - recipe/batch specifications, control points and processing parameters

- 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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