Modification history

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

| FBPDPR2001 | Operate a butter churning process |
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| 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 basic 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 food safety, and work health and safety codes, regulations and legislation 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 |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare the butter churning equipment and process for operation | 1.1 Confirm materials and personal protective equipment are available for operating requirements  1.2 Identify and confirm cleaning and maintenance requirements according to food safety requirements  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 procedures |
| 2. Operate and monitor the butter churning process | 2.1 Start up the butter churning process according to workplace procedures  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  2.7 Enter information in workplace records in required format |
| 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 |

| 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. | |
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| Skill | Description |
| Reading | * Read and interpret standard operating procedures for the butter churning process |
| Writing | * Complete records according to workplace guidelines using paper-based and/or electronic media |
| Numeracy | * Monitor agitation speeds, flow rates, temperature and ingredient addition systems for the butter churning process against production specifications |
| Navigate the world of work | * Apply workplace procedures to own role and responsibilities * Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental requirements * Maintain a clean and hazard-free work area * Maintain hygiene standards |
| Interact with others | * Report operational and safety information to relevant personnel using required communication method |
| Get the work done | * Solve routine problems according to workplace guidelines and using experience of past solutions |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPDPR2001 Operate a butter churning process | FDFDP2001A Operate a butter churning process | Updated to meet Standards for Training Packages | Equivalent unit |

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| 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 FBPDPR2001 Operate a butter churning process |
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| 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 completed all steps required to set up, operate and monitor, and complete at least one butter churning process, including:   * conducted pre-start checks on machinery used for churning butter * started, operated, monitored and adjusted butter churning process equipment to achieve required quality outcomes * taken corrective action in response to typical faults and inconsistencies * completed workplace records in required format * applied safe work practices and identified workplace health and safety hazards and controls * safely shut down equipment * applied food safety procedures to work practices * followed work health and safety procedures. | |

| Knowledge Evidence |
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| 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 and food safety risks associated with the process and related control measures * 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 * work health and safety hazards and controls * 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 sanitation procedures for butter churning equipment. |

| Assessment Conditions |
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| Assessment of this unit of competency must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a workplace setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * personal protective clothing and equipment * butter churning process and related equipment and services * materials required 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 * stock flow systems, production schedules and batch or recipe instructions * information on equipment capacity and operating parameters * specifications, control points and processing parameters * sampling schedules and test procedures and equipment * routine preventative maintenance schedule * documentation and recording requirements and procedures * relationships: * interactions with team members and supervisors or realistic scenarios or roleplays.   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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