Modification history

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

| FBPOPR2041X | Operate a mixing or blending and cooking 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 mixing or blending and cooking process.  This unit applies to individuals who work under general supervision in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a mixing or blending and cooking process and associated equipment.  This unit should not be delivered in a qualification with FBPOPR2028X Operate a mixing or blending process.  All work must be carried out to comply with workplace procedures according to state/territory health and safety, environmental 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. |
| Prerequisite Unit | Nil |
| Unit Sector | Operational (OPR) |

| 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 for work in mixing/blending and cooking processing area | 1.1 Read or listen to work instructions from supervisor and clarify where required  1.2 Confirm ingredients are available to meet production requirements  1.3 Confirm equipment is clean and not locked out  1.4 Wear appropriate personal protective clothing and ensure correct fit, according to health, safety and food safety requirements |
| 2. Prepare mixing/blending and cooking equipment and process for operation | 2.1 Fit machine components and related attachments and adjust to meet operating requirements  2.2 Enter processing and operating parameters to meet food safety and production requirements  2.3 Carry out pre-start checks according to health and safety and operating procedures |
| 3. Operate and monitor equipment | 3.1 Introduce ingredients and additives in the required quantities and sequence to meet recipe specifications  3.2 Start, operate and monitor the process for variation in operating conditions  3.3 Monitor the process to confirm that product meets specifications  3.4 Transfer mix to cooking location, as required  3.5 Monitor cooking process to ensure product meets specifications  3.6 Identify, adjust and report out-of-specification equipment, product or process outcomes according to workplace requirements  3.7 Follow and apply workplace housekeeping procedures and environmental requirements |
| 4. Shut down the mixing/blending and cooking process | 4.1 Identify the appropriate shutdown procedure  4.2 Shut down the process according to health and safety and operating procedures  4.3 Identify and report maintenance requirements according to workplace procedures  4.4 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. | |
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| Skill | Description |
| Reading | * Interpret workplace and standard operating procedures relevant to work task * Interpret production requirements |
| Writing | * Record processing data using digital and/or paper-based formats |
| Numeracy | * Weigh (mg, g, kg) and measure (ml, L) ingredients as required * Monitor and interpret production and process control indicators and data, including temperature (°C) * Monitor supply and flow of materials to and from the process |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPOPR2041X Operate a mixing or blending and cooking process | FBPOPR2041 Operate a mixing or blending and cooking process | Minor changes to Performance Criteria to clarify task  Foundation skills refined  Performance Evidence clarified  Minor changes to Knowledge Evidence to clarify requirements and Assessment Conditions | Equivalent |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4 |

| TITLE | Assessment requirements for FBPOPR2041X Operate a mixing or blending and cooking process |
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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 operated a mixing or blending and cooking process to produce at least one batch of product to specification, including:   * applying food safety practices * following safe work procedures * starting, monitoring and adjusting processing equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including: * time and temperature * agitation settings * weights * flow rates * flow diversion * characteristics of the mix, including colour, viscosity, density and consistency * characteristics of the cooked product * addressing routine processing issues. | |

| 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 preparing mixes and blends, including the characteristics and basic function of ingredients and additives used, method and sequence of ingredient addition required to achieve required blend characteristics and, where relevant, the purpose of conditioning, maturation or holding stages required prior to further processing of the mix * the flow of the mixing or blending and cooking process and the effect of product output on downstream processes * basic operating principles of equipment used in the mixing/blending and cooking process, including: * main equipment components * status and purpose of guards * equipment operating capacities and applications * the purpose and location of sensors and related feedback instrumentation * calibration schedules for scales and related weighing/measuring equipment * services required mixing/blending and cooking process and action to take if services are not available * quality characteristics and conditioning required of ingredients used, and their role in the product, including reconstituting dry ingredients and bringing ingredients to a required temperature * effect of ingredient quality/condition on the process, including variables including temperature, viscosity/texture, microbial load and acidity quality * heat treatment/cooking requirements for low and/or high acid foods as appropriate to production requirements * stages and changes that occur during the blending and heat treatment/cooking stages * quality requirements of the cooked product, including chemical, textural and flavour profiles * relationship between time and temperature in the cooking 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 and early warning signs of potential problems * common causes of variation in the mixing/blending and cooking process and corrective action required * contamination/cross contamination and food safety issues associated with mixing and blending and related control measures * common microbiological, physical, chemical and allergen hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences, and control methods to prevent occurrence * health and safety hazards and controls relevant to the mixing/blending and cooking process * requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage * isolation, lock-out and tag-out procedures and responsibilities required for the mixing/blending and cooking process * procedures and responsibility for reporting production and performance information * environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process * basic operating principles of process control, including the relationship between control panels and systems and the physical equipment * cleaning and sanitation procedures required for mixing/blending and cooking equipment * recording procedures to ensure traceability of product. |

| Assessment Conditions |
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| Assessment of skills in this unit of competency must take place under the following conditions:   * physical conditions: * a food processing workplace or an environment that accurately represents workplace conditions * resources, equipment and materials: * mixing/blending and cooking equipment and related services * ingredients to be cooked * personal protective clothing * cleaning materials and equipment * specifications: * work procedures, including advice on safe work practices, food safety, quality and environmental requirements * information on equipment capacity and operating parameters * production schedule/batch/recipe specifications, control points and operating parameters * recording requirements.   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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