Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 5.0 |

| FBPPBK3XX2 | Operate and monitor a pastry production 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 pastry production process, including mixing and sheeting or layering processes.  The unit applies to individuals who take responsibility the operation and monitoring of the pastry production process and associated equipment in a production baking environment. The work includes identifying and providing solutions to routine and some non-routine problems.  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 | Production baking (PBK) |

| 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 pastry production equipment and process for operation | 1.1 Confirm availability of baked product to meet production requirements  1.2 Identify health and safety hazards and address risks, including using appropriate personal protective clothing and equipment  1.3 Identify and confirm equipment is clean and maintenance requirements have been met, according to health, safety and food safety requirements  1.4 Fit machine components and related attachments and adjust to meet operating and safety requirements  1.5 Select processing and operating parameters to meet safety and production requirements  1.6 Carry out pre-start checks according to operator instructions |
| 2. Operate and monitor equipment | 2.1 Start the pastry production process according to workplace procedures  2.2 Monitor equipment to ensure optimal operations  2.3 Monitor the process to confirm that product meets specifications  2.4 Identify, rectify and report out-of-specification product and process outcomes  2.5 Conduct work and maintain a clean and tidy workplace according to workplace environmental guidelines |
| 3. Shut down the process | 3.1 Complete the pastry production process safely, according to workplace procedures  3.2 Identify and report maintenance requirements  3.3 Maintain workplace records accurately 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 work instructions and product specifications |
| Writing | * Record processing information using electronic, digital and/or paper-based formats |
| Oral communication | * Follow instructions and ask questions to clarify information |
| Numeracy | * Interpret temperature gauges and scales * Use basic arithmetic to calculate quantities * Scale recipes up and down * Weigh (g, kg) and measure (ml, L) ingredients |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPPBK3XX2 Operate and monitor a pastry production process | FBPPBK2007 Operate a pastry production process | Unit code and title updated to better reflect 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 to clarify requirements | Equivalent unit |

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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 FBPPBK3XX2 Operate and monitor a pastry production 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 set up, operated, adjusted and shut down pastry production equipment to produce at least one batch of pastries to meet specifications, including:   * applying safe work procedures * following food safety procedures * starting, operating, monitoring and adjusting pastry production process equipment to achieve production outcomes, including setting up and starting up mixers, rollers and laminating processes * monitoring supply and flow of materials to and from the dough preparation process and equipment operation to confirm process remains within specification, including: * flour temperature and type * water temperature * fat type, distribution and percentage required for specific pastry types * rework pastry addition * dough characteristics * mixing time * rolling and laminating dough to specification, including: * ensuring in-line hoppers are filled with flour to prevent pastry sticking to rollers * roller settings are within specification * checking pastry thickness, fat percentage and number of pastry layers * monitoring supply and flow of materials to and from the laminating process and equipment operation to confirm process remains within specification * cutting and stacking or rolling pastry according to production requirements * using process control systems according to workplace procedures * taking corrective action in response to typical faults and inconsistencies. | |

| 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 pastry production process * procedures for selecting ingredients and materials for pastry production, including: * recipe and production specifications * supply, condition and quality of ingredients * types of pastry ingredients, including: * flour * water * ice * animal fat * vegetable fat * salt * pre-mixes * baking powder * melinta * metrex * sodium propate * rework pastry * sugar * yeast * types of equipment, including: * weighing equipment * mixing equipment * laminating and rolling equipment * cutting and stacking equipment * testing equipment * spike rollers and cutters * conveyors * rework bins * procedures for starting, operating, monitoring and adjusting pastry production process equipment to achieve production outcomes, including setting up and starting up mixers, rollers and laminating processes * procedures for monitoring control points and conducting inspections to confirm process remains within specification * procedures for rolling and laminating dough to specification, including: * ensuring in-line hoppers are filled with flour to prevent pastry sticking to rollers * roller settings are within specification * checking pastry thickness, fat percentage and number of pastry layers * procedures for monitoring supply and flow of materials to and from the laminating process and equipment operation to confirm process remains within specification * procedures for cutting and stacking or rolling pastry according to production requirements * basic operating principles of pastry production equipment, including: * main equipment components * status and purpose of guards * equipment operating capacities and applications * purpose and location of sensors and related feedback instrumentation * typical equipment faults and related causes, including signs and symptoms of faulty equipment, loss of power, and early warning signs of potential problems * basic operating principles of process control, including the relationship between control panels and systems and pastry production equipment * key features of the flow of the pastry production process and the effect of outputs on customer satisfaction and downstream processes, including filling, forming and baking * quality requirements, including: * materials and ingredients and effect of variation on pastry production process performance * finished pastry * pastry production process specifications, procedures and operating parameters, including: * preparing dough * laminating * rolling * cutting and stacking pastry * methods used to monitor the pastry production process, including: * inspecting, measuring and testing processes * inspection or test points (control points) in the process * related procedures and recording requirements * common causes of variation and corrective action required, including the relationships between time and temperature and humidity in the pastry production process * contamination/cross contamination and food safety risks associated with the process and related control measures * good manufacturing practices (GMP) relevant to work task * awareness of 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 procedures, including: * limitations of personal protective equipment * routine shut down requirements * emergency shut down procedures * 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 * waste/rework collection and handling procedures * cleaning and sanitation procedures required for production equipment and work area * recording procedures to track traceability of product. |

| Assessment Conditions |
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| Assessment of this unit of competency must take place under the following conditions:   * physical conditions: * a production bakery or an environment that accurately represents workplace conditions * resources, equipment and material: * personal protective clothing and equipment * pastry production equipment * ingredients to produce pastry products * cleaning materials and equipment * specifications: * work instructions including control points and pastry production parameters * production schedule, and recipe and batch specifications for pastry products * information on equipment capacity and operating parameters * 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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