Modification history

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

| FBPPBK2005 | Operate a doughnut making process |
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| Application | This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down the doughnut manufacturing process.  This unit applies to individuals who work in a baking production environment under general supervision with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems relating to the operation and monitoring of doughnut production.  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 manufacturing equipment and process for operation | 1.1 Read or listen to work instructions from supervisor and clarify where needed  1.2 Identify work health and safety hazards and report to supervisor  1.3 Wear appropriate personal protective equipment and ensure correct fit  1.4 Confirm availability of materials to meet production requirements  1.5 Identify and confirm cleaning and maintenance requirements have been met  1.6 Fit machine components and related attachments and adjust to meet operating requirements  1.7 Select processing and operating parameters to meet safety and production requirements  1.8 Check and adjust equipment according to manufacturer instructions to ensure optimum performance  1.9 Carry out pre-start checks according to operator instructions |
| 2. Operate and monitor the doughnut manufacturing process | 2.1 Start the doughnut-making process according to workplace procedures  2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation  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 Use equipment to apply topping and fillings according to production specifications and operator instructions  2.6 Conduct work and maintain a clean and tidy workplace according to workplace environmental guidelines |
| 3. Shut down the process | 3.1 Complete the 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 text in work instructions and production schedule and recognise workplace signage |
| Numeracy | * Interpret symbols and numbers to calibrate equipment and check frying temperatures * Use basic arithmetic to calculate quantities of doughnut mix, oil, glazing and other products needed for production |
| Oral communication | * Participate in verbal exchanges to ask questions and convey workplace information |
| Navigate the world of work | * Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility |
| Interact with others | * Follow accepted practices and protocols for reporting issues to supervisors |
| Get the work done | * Follow clearly defined instructions to plan and assemble resources and sequence tasks required to produce doughnuts * Monitor processes and control points, identify routine problems related to own work or role, and initiate standard procedures to resolve * Use key functions and follow routine procedures for using digital technology and automated equipment |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPPBK2005 Operate a doughnut making process | FDFBK2005A Operate a doughnut making process | Updated to meet Standards for Training Packages  Minor changes to performance criteria for clarity | 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 FBPPBK2005 Operate a doughnut making 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 a doughnut-making process on at least three occasions, including:   * accessing workplace information to identify doughnut manufacturing requirements * selecting, fitting and using personal protective equipment * confirming supply of necessary materials and services * confirming condition of materials, including confirming flour and water temperature, flour type and oil type * conducting pre-start checks, including: * inspecting equipment condition to identify any signs of wear * selecting appropriate settings and/or related parameters * cancelling isolation or lock outs * confirming that equipment is clean and correctly configured for processing requirements * positioning sensors and controls correctly * ensuring any scheduled maintenance has been carried out * confirming that all safety guards are in place and operational * conducting pre-start checks for equipment, including: * doughnut mixing and forming equipment * deep frying equipment * cooling tunnels/spirals * starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring: * materials transfer prior to commencing mixing * mixing parameters for water and flour temperature * sequence of ingredient addition and mixing times * forming parameters, including air pressure to maintain weight of doughnut * proving parameters - humidity and temperature within prover and time * frying parameters - oil temperature, appearance of cooked doughnuts and time * operating finishing/filling equipment according to workplace procedures, including: * preparing decorating ingredients * mixing and heating, crushing, cutting or sieving toppings * monitoring temperature of toppings, spread/application of toppings and glazes, jam/filling placement and quantity and appearance of finished product * using process control systems according to workplace procedures * taking corrective action in response to out-of-specification results in line with own role and responsibilities * following work health and safety procedures including: * responding to and/or reporting equipment failure * locating emergency stop functions on equipment * following isolation and lock out or tag out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance * completing workplace records * applying environmental and food safety policies and procedures to work practices, including: * maintaining work area to meet housekeeping standards * cleaning and sanitising equipment according to workplace 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 doughnut manufacturing process * stages and requirements of each processing stage in doughnut manufacture, including: * mixing * proving * frying * filling * finishing * role of main ingredients, including: * flour * yeast * water * ice * oil * glazes * topping * pre-mixes * types of equipment, including: * doughnut mixing and forming equipment * filling equipment * finishing equipment * deep frying equipment, gas and electric * cooling tunnels and spirals * weigh scales * hoppers * forming equipment * cutters * injectors * provers * enrobers * basic operating principles of equipment, including: * main equipment components * status and purpose of guards * equipment operating capacities and applications * purpose and location of sensors and related feedback instrumentation * starting, operating, monitoring and adjusting process equipment to achieve required outcomes * 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 the doughnut production equipment * key features of the flow of the doughnut manufacturing process and the effect of outputs on customer satisfaction and downstream processes, including packaging * quality requirements of materials and effect of variation on doughnut manufacturing process performance * quality characteristics to be achieved by the finished doughnut * process specifications, procedures and operating parameters, including procedures for adjusting water temperature to compensate for atmospheric conditions * operating requirements and parameters and corrective action required where results are out-of-specification operating parameters * methods used to monitor the doughnut manufacturing process, including: * inspecting, measuring and testing * inspection or test points (control points) in the process * related procedures and recording requirements * temperature of toppings * spread and application of toppings and glazes * placement of jams and fillings * quantity and appearance of finished product * common causes of variation and corrective action required * doughnut-finishing requirements, including: * preparation methods * monitoring of parameters * application of finishings * quality requirements * work health and safety hazards and controls, 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 * environmental and food safety issues and controls relevant to the doughnut manufacturing process, including: * waste and rework collection and handling * contamination and food safety risks * cleaning and sanitation procedures. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:  If any of the first level dot points do not apply to this unit, then please delete the point completely, e.g. if no interactions are needed with people at all, then you would delete the relationships point and second level points.   * [physical conditions:] * [e.g. skills must be demonstrated in [a commercial kitchen/a racing stable/veterinary practice/vineyard] or an environment that accurately represents workplace conditions] * [resources, equipment and materials:] * [e.g. live horses] * [e.g. use of specific tools] * [e.g. use of specific items of personal protective equipment] * [specifications:] * [e.g. use of specific workplace documents such as policies, procedures, processes, forms] * [e.g. use of manufacturer’s operating instructions for specific equipment, machinery, etc.] * [e.g. access to specific safety data sheets] * [e.g. use of workplace instructions/job specifications/client briefs] * [access to specific legislation/codes of practice] * [relationships: (include only if the individual needs to interact with internal and/or external people during assessment of skills): * [e.g. client(s), customer(s)] * [e.g. team member(s), supervisor(s)] * [timeframes: (include only if time is an essential assessment condition) * [e.g. according to time specified in job sheet] * [e.g. within a specific time period] * [final point only ends with a full stop.]   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.  Delete the following if there are no additional assessor requirements.  [In addition, the following specific assessor requirements apply to this unit:   * SI Bullet List 1 * SI Bullet List 1: * SI Bullet List 2.] |

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