

**Modification history**

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

| FBPPBK2001               | Operate a cooling and slicing process  |
|--------------------------|--|
| <b>Application</b>       | <p>This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a process to cool and slice cake baked on a band or belt. It does not apply to manual cutting of cake baked in a tin or pan.</p> <p>The unit applies to individuals who work in a cake 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 a cooling and slicing process and associated equipment.</p> <p>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.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p> |
| <b>Prerequisite Unit</b> | Nil  |
| <b>Unit Sector</b>       | Production baking (PBK)  |

| 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 cooling and cutting equipment and process for operation | 1.1 Read or listen to work instructions from supervisor and clarify where needed<br>1.2 Identify work health and safety hazards and report to supervisor<br>1.3 Wear appropriate personal protective equipment and ensure correct fit<br>1.4 Confirm availability of baked cake to meet production requirements<br>1.5 Identify and confirm cleaning and maintenance requirements have been met<br>1.6 Fit machine components and related attachments and adjust to meet operating and safety requirements<br>1.7 Select processing and operating parameters to meet safety and production requirements<br>1.8 Check and adjust equipment according to manufacturer instructions to ensure optimum performance<br>1.9 Carry out pre-start checks according to operator instructions |
| 2. Operate and monitor the cooling and cutting process                 | 2.1 Start and operate the cooling and cutting process according to workplace procedures<br>2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation<br>2.3 Monitor the process to confirm that cake temperature and cut pieces meet specifications<br>2.4 Identify, report and rectify out-of-specification product and process outcomes<br>2.5 Conduct work and maintain a clean and tidy workplace according to workplace environmental and food safety procedures  |

| <b>Elements</b>                                  | <b>Performance Criteria</b>  |
|--|--|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>   |
| 3. Shut down the process                         | 3.1 Complete the process safely according to workplace procedures<br>3.2 Identify and report maintenance requirements according to workplace procedures<br>3.3 Maintain workplace records accurately according to workplace procedures |

| <b>Foundation Skills</b>   |  |
|--|--|
| <i>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.</i> |  |
| <b>Skill</b>   | <b>Description</b>   |
| Reading  | <ul style="list-style-type: none"> <li>Interpret text in work instructions and recognise workplace signage</li> </ul>  |
| Numeracy   | <ul style="list-style-type: none"> <li>Interpret symbols and numbers on temperature gauges and to calibrate equipment</li> <li>Use basic arithmetic to calculate quantities</li> <li>Measure size and weight of cake pieces against specifications</li> </ul>  |
| Oral communication   | <ul style="list-style-type: none"> <li>Participate in verbal exchanges to ask questions and convey workplace information</li> </ul>  |
| Navigate the world of work   | <ul style="list-style-type: none"> <li>Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility</li> </ul>  |
| Interact with others   | <ul style="list-style-type: none"> <li>Follow accepted practices and protocols for reporting issues to supervisors</li> </ul>  |
| Get the work done  | <ul style="list-style-type: none"> <li>Follow clearly defined instructions to plan and assemble resources and sequence tasks required to operate cooling and slicing process</li> <li>Monitor processes and control points, identify routine problems related to own work or role and initiate standard procedures to resolve</li> <li>Use key functions and follow routine procedures for using digital technology and automated equipment</li> </ul> |

| <b>Unit Mapping Information</b>                     |   |  |                           |
|---|---|--|---------------------------|
| <b>Code and title current version</b>               | <b>Code and title previous version</b>              | <b>Comments</b>  | <b>Equivalence status</b> |
| FBPPBK2001<br>Operate a cooling and slicing process | FDFBK2001A<br>Operate a cooling and slicing process | Updated to meet Standards for Training Packages<br>Minor changes to Performance Criteria for clarity | Equivalent unit           |

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

|              |   |
|--------------|---|
| <b>TITLE</b> | <b>Assessment requirements for FBPPBK2001 Operate a cooling and slicing process</b> |
|--------------|---|

**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 cooling and slicing process for cake products on at least three separate occasions, including:

- accessing workplace information to identify cooling and cutting requirements
- selecting, fitting and using personal protective clothing and equipment
- confirming supply of cake and necessary materials and services
- conducting pre-start checks on machinery used for cooling and slicing cake including:
  - inspecting knife condition to identify any signs of wear
  - selecting appropriate settings to meet cake dimension requirements
  - cancelling isolation or lock outs
  - confirming equipment is clean and correctly configured for processing requirements
  - positioning sensors and controls correctly
  - ensuring any scheduled maintenance has been completed
  - confirming all safety guards are in place and operational
- confirming cooling and cutting equipment settings, including:
  - conveyor speed
  - cooling tunnel settings
  - guides
  - knife position
- starting, operating, monitoring and adjusting process equipment to achieve cake production specifications including:
  - cake temperature - temperature gauges
  - throughput
  - cut cake appearance, dimensions and weight
  - knife position and condition
- monitoring process control points and supply and flow of materials to and from the process
- taking corrective action in response to typical faults and inconsistencies in line with own role and responsibilities
- following work health and safety procedures, including:
  - responding to and reporting equipment failure
  - locating emergency stop functions on equipment
  - following isolation and lock out and tag out procedures to take process and related equipment off-line in preparation for cleaning and maintenance
- shutting down equipment safely according to workplace procedures
- 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**

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 cake cooling and slicing process
- basic operating principles of cooling and slicing equipment and main components including:
  - status and purpose of guards
  - operating capacities and applications of equipment used in performance evidence
  - purpose and location of sensors and related feedback instrumentation
  - procedures to replace rotary knives
- types and safe operating procedures for cooling and slicing equipment, including:
  - conveyors
  - cooling tunnels
  - guides

| Knowledge Evidence   |
|--|
| <ul style="list-style-type: none"> <li>• rotary knives</li> <li>• guillotine knives</li> <li>• typical equipment faults and related causes, including:               <ul style="list-style-type: none"> <li>• signs and symptoms of faulty equipment</li> <li>• early warning signs of potential problems</li> </ul> </li> <li>• basic operating principles of process control and relationship between control panels and systems, and cooling and slicing equipment</li> <li>• key features of flow of cooling and slicing process and effect of outputs on downstream processes</li> <li>• outcomes to be achieved by cooling and slicing process, including:               <ul style="list-style-type: none"> <li>• required temperature range for cake types</li> <li>• scope to adjust product length to achieve a given weight</li> </ul> </li> <li>• operating requirements and parameters, and corrective action required where operation is outside specified operating parameters, including:               <ul style="list-style-type: none"> <li>• effect of ambient temperature on the cooling process</li> <li>• possible cause of condensation formation on product from the cooling tunnel</li> </ul> </li> <li>• methods used to monitor the cooling and slicing process, including:               <ul style="list-style-type: none"> <li>• inspecting, measuring and testing</li> <li>• inspection or test points (control points)</li> <li>• related procedures and recording requirements</li> </ul> </li> <li>• common causes of variation and corrective action required</li> <li>• work health and safety hazards and controls, including:               <ul style="list-style-type: none"> <li>• risks associated with working with refrigerant and action required in the event of a leak</li> <li>• isolation, lock out and tag out procedures and responsibilities</li> </ul> </li> <li>• procedures for confirming services, including:               <ul style="list-style-type: none"> <li>• air</li> <li>• water</li> <li>• steam</li> </ul> </li> <li>• environmental and food safety issues and controls relevant to cooling and slicing process, including:               <ul style="list-style-type: none"> <li>• contamination and food safety risks</li> <li>• waste and rework collection and handling procedures</li> <li>• cleaning and sanitation procedures</li> </ul> </li> <li>• equipment shutdown requirements relevant to performance evidence, including:               <ul style="list-style-type: none"> <li>• emergency and routine shutdowns</li> <li>• procedures to follow in the event of a power outage</li> </ul> </li> <li>• procedures and responsibility for reporting production and performance information.</li> </ul> |
| Assessment Conditions  |
| <p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions:               <ul style="list-style-type: none"> <li>• a commercial bakery or an environment that accurately represents workplace conditions</li> </ul> </li> <li>• resources, equipment and material:               <ul style="list-style-type: none"> <li>• personal protective clothing and equipment</li> <li>• cooling and slicing equipment, including conveyors, cooling tunnels, rotary knives, guillotine knives and guides</li> <li>• cake for cooling and slicing</li> <li>• documentation or technology for recording information</li> <li>• cleaning procedures, materials and equipment</li> </ul> </li> <li>• specifications:               <ul style="list-style-type: none"> <li>• work instructions including control points and cooling and slicing processing parameters</li> <li>• production schedule for cooling and slicing process</li> <li>• information on equipment capacity and operating parameters</li> <li>• workplace procedures for cooling and slicing process</li> </ul> </li> <li>• relationships (internal and/or external):               <ul style="list-style-type: none"> <li>• workplace supervisor</li> </ul> </li> <li>• timeframes:               <ul style="list-style-type: none"> <li>• according to work requirements.</li> </ul> </li> </ul>  |

|                              |
|------------------------------|
| <b>Assessment Conditions</b> |
|------------------------------|

|  |
|--|
| Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |
|--|

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