Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package version 2.0. |

| FBPFST5XXX | Implement and review the production of gums and jellies |
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| Application | This unit of competency describes the skills and knowledge required to implement and review the preparation and manufacture of gums and jellies. The individual is required to use knowledge of food science and processes to determine the required food safety, quality and performance of food production equipment.  This unit applies to individuals who are responsible for maintaining product safety, quality and efficiency in the food processing by managing their own work and the quality of the work of others within known parameters.  No occupational licensing or certification requirements apply to this unit at the time of publication. However, legislative and regulatory requirements for food processing exist so local requirements must be checked. All work must comply with Australian food safety standards and relevant codes of practice. |
| Prerequisite Unit | Nil |
| Unit Sector | Food science and technology (FST) |

| 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 the manufacture of gums and jellies. | 1.1 Establish the statutory compositional requirements for the different types of gums and jellies  1.2 Select the required formulation of gums and jellies  1.3 Select the appropriate production system and the preferred sequence of activity to prepare the system for operation  1.4 Prepare equipment and access the safe operating procedures for its operation |
| 2. Monitor the manufacture of gums and jellies to ensure quality standards are met. | 2.1 Implement the production schedule to ensure all resources and requirements are available and meet company requirements  2.2 Set the production system to operating specifications before and during production  2.3 Interpret and document data requirements and collection points appropriate for food safety, quality and production standards  2.4 Implement and monitor procedures to deal with non-conformance in relation to process and the final product  2.5 Implement and monitor cooking and moulding procedures  2.6 Implement and monitor process control systems |
| 3. Diagnose, rectify and report problems arising from the preparation and manufacture of gums and jellies | 3.1 Identify product defects and the cause  3.2 Conduct a sensory analysis and analyse results  3.3 Implement adjustments to inputs, process and equipment to maintain quality of product  3.4 Report problems to designated person |
| 4. Review production processes | 4.1 Review the critical control points (CCPs) and critical limits for product safety  4.2 Review the operating procedures and the process control system for food safety and quality  4.3 Review the safe work systems for processing  4.4 Review environmental impacts and energy efficiencies for processing |

| 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 | * Interprets food safety guidelines and regulations * Interprets product specifications, quality and workplace procedures |
| Numeracy | * Maintains and analyses data resulting from testing of products * Determines calibration procedures and schedule for test equipment |
| Navigate the world of work | * Monitors adherence to legal and regulatory standards and responsibilities for self and others |
| Interact with others | * Clarifies the purpose and possible actions to be taken as a result of work related communications |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPFST5XXX Implement and review the production of gums and jellies | FDFFST4032A Implement and review the production of gums and jellies | Updated to meet Standards for Training Packages  Minor changes to Performance Criteria to clarify intent  Unit code updated to reflect AQF level | 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 FBPFST5XXX Implement and review the production of gums and jellies |
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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 effectively implemented and reviewed the processing of at least two different gums and jellies, including:   * selecting and planning the production process for each product * implementing production systems and monitoring the output of each process * determining and conducting testing protocols for quality assessment * operating equipment and accessories used in the preparation and manufacture of gums and jellies * finishing gelatinised products to prevent sticking * checking product against market specifications * completing data collection and documentation required for quality control * assessing production procedures against food safety and quality requirements * identifying and addressing defects during production and of final products. | |

| 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:   * the statutory compositional requirements for the different types of gums and jellies * the formulations, methods of manufacture, methods of forming and packaging of gums and jellies * the range of gelatinised products including 'gummi' and other types of starch moulded products, liquorice and Turkish delight, and their formulations * processes used to gelatinise different confectionery masses and form these masses to maintain the desired product shape * the role of the major ingredients found in gums and jellies * the role, properties and use of different gelatinising agents including gelatine, starches, pectins and agar * critical factors in the preparation and manufacture of gums and jellies * the production system for the preparation and manufacture of gums and jellies including production instruction, quality assurance requirements and or/specifications, production specification and or/standards, production equipment, production procedures, cleaning procedures and materials and raw materials * potential product defects and their causes in the preparation and manufacture of gums and jellies * the interrelationships between suppliers of products and internal/external customers * stages of production, critical control points (CCPs) and critical limits * resource requirements and environmental impacts of the preparation and manufacture of gums and jellies * packaging procedures * quality and continuous improvement processes * sensory analysis techniques * work health and safety (WHS) hazards and controls relating to work processes. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a workplace setting or an environment that accurately represents a real food production workplace * resources, equipment and materials: * production process and related equipment, manufacturers’ advice and operating procedures * specifications: * tests used to report relevant product/process information and recorded results.   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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