Modification history

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

| FBPFST4035 | Review standards and procedures for the processing of high and low boil confectionery |
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| Application | This unit of competency describes the skills and knowledge required to implement and review the standards and procedures for manufacture of high and low boil confectionery.  This unit applies to individuals who have roles in product design, quality assurance and production management. The unit typically applies to staff who have responsibility for maintaining product safety, quality and efficiency in food production in the confectionery sector. Depending on the workplace application, the individual is also required to liaise with engineering and maintenance specialists  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. Carry out the preparation and manufacture of high and low boil confectionery to meet quality standards | 1.1 Prepare equipment and accessories for the preparation and manufacture of high and low boil confectionery  1.2 Assemble and prepare ingredients and check product formulations  1.3 Select the appropriate production system and a sequence of activity to prepare the system for operation |
| 2. Monitor the preparation and manufacture of high and low boil confectionery products to ensure quality standards are met | 2.1 Implement standard operating procedures  2.2 Implement the production schedule to ensure all resources and requirements are available and meet company standards  2.3 Set the production system to operating specifications before and during production  2.4 Interpret and document data requirements for food safety, quality and production standards  2.5 Determine data collection points consistent with equipment capabilities and data requirements  2.6 Develop procedures to deal with non-conformance in relation to process and the final product  2.7 Implement and monitor process control system |
| 3. Diagnose, rectify and report problems arising from the preparation and manufacture of high and low boil confectionery | 3.1 Establish sensory evaluation and product testing protocols to identify defects and maintain organoleptic quality of product  3.2 Implement adjustments to inputs, process and equipment in response to analysed results  3.3 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 Develop and implement a sampling plan  4.3 Conduct a sensory analysis and analyse results  4.4 Undertake food tests and generate data for the product label  4.5 Review the operating procedures and the process control system for food safety and quality  4.6 Review the safe work systems for processing  4.7 Review the 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 schedules 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 |
| FBPFST4035 Review standards and procedures for the processing of high and low boil confectionery | FDFFST4035A Implement and review the processing of high and low boil confectionery | Updated to meet Standards for Training Packages  Title changed | 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 FBPFST4035 Review standards and procedures for the processing of high and low boil confectionery |
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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 reviewed the standards and procedures for the processing of high and low boil confectionary, on at least one occasion, including:   * interpreting market specifications for high and low boil confectionery * selecting the formulation, method of manufacture, method of forming and packaging of high and low boil confectionery * implementing a production schedule to ensure all resources and requirements are available and meet company requirements * setting the production system to operating specifications before and during production * recognising the organoleptic properties of different types of high and low boil confectionery * determining testing protocols for quality assessment * operating equipment and accessories used in the preparation and manufacture of high and low boil confectionery * 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 * using industry standard terminology. | |

| 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 high and low boil confectionery * different types of high and low boil confectionery * formulation of high and low boil confectionery * purpose of each process used in the preparation and manufacture of high and low boil confectionery * relationships between the processes used in the preparation and manufacture of high and low boil confectionery * outputs of each of the processes used in the preparation and manufacture of high and low boil confectionery * potential product defects and their causes which may arise in the preparation and manufacture of high and low boil confectionery * the interrelationships between suppliers of products and internal/external customers * critical factors in the preparation and manufacture of high and low boil confectionery * solubility and crystallisation properties of ingredients used and their relationship to texture * relationship of the boiling point of a confectionery syrup to its soluble solids content * the relationship of pressure and vacuum to the boiling point of a confectionery syrup of a specific soluble solids content and the uses made in production of this relationship * the concept of equilibrium relative humidity (ERH) or water activity (Aw) of a confectionery product * resource requirements and environmental impacts of the preparation and manufacture of high and low boil confectionery * testing procedures for raw materials through to manufactured product * stages of production, CCPs and critical limits * packaging procedures * quality and continuous improvement processes * sensory analysis techniques and analysis * work health and safety 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 confectionary production workplace * resources, equipment and materials: * production process and related equipment, manufacturers’ advice and operating procedures * methods and related software systems for collecting data and calculating yields, efficiencies and material variances appropriate to production environment * 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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