Modification history

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

| FBPFST5026 | Review standards and procedures for the production of ice creams and frozen dairy products |
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| Application | This unit of competency describes the skills and knowledge required to monitor and review production standards and procedures for ice creams and frozen dairy products. 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. Depending on the workplace application, the individual is required to liaise with engineering and maintenance specialists.  This unit applies to individuals who are responsible for maintaining product safety, quality and efficiency in the dairy processing sector and exercise autonomy in undertaking complex work related to product design, quality assurance and production management.  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 ice creams and frozen dairy products | 1.1 Establish the statutory compositional requirements for the different types of ice creams and frozen dairy products  1.2 Select the required formulation of ice creams and frozen dairy products  1.3 Select the appropriate production system and the sequence of activity to prepare the system for operation  1.4 Prepare equipment and access safe operating procedures for its operation |
| 2. Monitor the preparation and manufacture of ice creams and frozen dairy products to ensure quality standards are met | 2.1 Establish resource requirements for the preparation and production of the products  2.2 Implement a production schedule to ensure all resources and requirements are available and meet company requirements  2.3 Set the production system to operating specifications before and during production  2.4 Test chilling and refrigeration procedures  2.5 Determine data requirements for food safety, quality and production standards  2.6 Establish data collection points consistent with equipment capabilities and data requirements  2.7 Develop procedures to deal with non-conformance in relation to process and the final product  2.8 Implement and monitor process controls for the preparation and manufacture of the products |
| 3. Diagnose, rectify and report problems arising from the preparation and manufacture of ice creams and frozen dairy products | 3.1 Identify product defects and their causes in the preparation and manufacture of the products  3.2 Establish sensory evaluation and product testing protocols to identify defects  3.3 Implement a system to identify product defects in the preparation and production process  3.4 Develop and implement a sampling plan for ice creams and frozen dairy products  3.5 Conduct and analyse sensory analysis  3.6 Undertake food tests  3.7 Identify and implement adjustments to process and equipment in response to analysed results  3.8 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 operating procedures for food safety and quality  4.3 Review safe work systems for processing of products  4.4 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 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 |
| Get the work done | * Problem solves issues as they arise |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPFST5026 Review standards and procedures for the production of ice creams and frozen dairy products | FDFFST5026A Implement and review the production of ice creams and frozen dairy products | 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 FBPFST5026 Review standards and procedures for the production of ice creams and frozen dairy products |
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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 reviewed standards and procedures for the production of ice creams and frozen dairy products on at least one occasions, including:   * incorporating confectionary, flavourings and fruits into ice creams and frozen dairy desserts * identifying and diagnosing defects in the preparation and manufacture of ice creams and frozen dairy desserts * implementing adjustments to process/equipment in response to system review * carrying out product sampling and testing according to the CCP-based plan and operational procedures * using technology to access information, prepare reports, and to access and prepare relevant data * 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:   * types of ice creams and frozen dairy products * the role of the major ingredients found in ice creams and frozen dairy products * the production system for the preparation and manufacture of ice creams and frozen dairy products 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 * the output of each of the processes used in the preparation and manufacture of ice creams and frozen dairy products * the principles of operation of equipment and accessories used in the preparation and manufacture of ice creams and frozen dairy products * the interrelationships between suppliers of products and internal/external customers * specific domestic and export market specifications for ice creams and frozen dairy products * different types and formulation of ice creams and frozen dairy products * pre-treatment, cooking and incorporation of confectionary, flavourings and fruits * critical factors in the preparation and manufacture of ice creams and frozen dairy products * identification of defects during production and of final products * testing procedures for raw materials through to manufactured product * quality and continuous improvement processes * sensory analysis techniques * chemical and physical hazards which may affect ice creams and frozen dairy products * storage, handling and preparation procedures for ice creams and frozen dairy products * work health and safety procedures relevant to a food processing environment * sanitation and hygiene procedures * CCP principles and critical limits in a CCP program * identification of Critical Control Points (CCPs) and critical limits * water and energy use and recycling in processing * regulatory requirements associated with ice creams and frozen dairy products * environmental impacts of the food processing operation. |

| 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 diary processing 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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