Modification history

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

| FBPFST5008 | Develop a new food product |
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| Application | This unit of competency describes the skills and knowledge required to develop an innovative food, beverage or related product, from a concept to a packaged and labelled finished product, in general food production, meat and seafood industries. The individual is required to utilise deep knowledge in a specific technical area and to design and communicate solutions to sometimes complex problems. Depending on the product developed, the individual is also required to liaise with production managers, engineering and maintenance specialists.  This unit applies to individuals who are responsible for food product development and undertake roles in product design, quality assurance or 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 |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Develop concept for the new product | 1.1 Develop a concept for new innovative product  1.2 Identify the potential of an innovative new product  1.3 Determine the market for new product  1.4 Determine the viability of product concept |
| 2. Identify product development parameters | 2.1 Determine product parameters  2.2 Determine equipment required for producing new product  2.3 Determine analytical tests to be conducted to identify quality and safety parameters  2.4 Determine processing parameters  2.5 Determine ingredients required for producing new product |
| 3. Trial new product | 3.1 Conduct a series of trials of new product  3.2 Determine improvements and or changes required for each successive trial  3.3 Record details of each trial |
| 4. Analyse new product | 4.1 Determine appropriate analytical tests to be conducted to verify product safety and quality  4.2 Conduct appropriate tests to determine quality and safety of product  4.3 Record test results  4.4 Determine safety and quality of product using analytical results |
| 5. Design label for product | 5.1 Establish concept for product label  5.2 Identify requirements to ensure the product label is compliant  5.3 Develop a compliant label for the food product |
| 6. Package product | 6.1 Determine the equipment required for packaging new food product  6.2 Establish suitable packaging materials for new product  6.3 Package final product |
| 7. Document development process | 7.1 Document conceptual ideas  7.2 Conduct and document research relevant to new product  7.3 Verify and document analysed results of new product quality and safety  7.4 Document details and results of product trials and explain and justify changes to product as a result of trial |

| 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 research materials * Interprets food safety guidelines, standards and regulations * Interprets product quality and workplace procedures |
| Numeracy | * Interprets analytical results * Maintains and analyses data resulted from testing of new food products * Determines calibration procedures and schedule for test equipment |
| Interact with others | * Clarifies the purpose and possible actions to be taken as a result of work related communications * Provides information about innovative practices, processes and products |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPFST5008 Develop a new food product | FDFFST5008A Develop a new food product | Updated to meet Standards for Training Packages | 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 FBPFST5008 Develop a new food product |
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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 developed at least one new food product, including:   * interpreting and applying food safety requirements, standards and legislative requirements * developing product ideas and concepts * conducting market research to inform product development * assessing the viability of product concepts * applying testing and sensory analysis techniques relevant to new product development * interpreting analytical results * establishing processing techniques and parameters relevant to product under development * determining safety and quality implications of product * determining and assessing packaging options * recording, documenting and verifying information relating to product development. | |

| 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:   * customer needs and market research techniques * food safety and food quality parameters * food processing principles relevant to new product * food testing and sensory analysis techniques * food packaging and labelling requirements * legislative requirements associated with new product. |

| 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 workplace * resources, equipment and materials: * laboratory facilities * production facilities * computers, printers and appropriate software packages * specifications: * legislative requirements applicable to food * research materials including journals, periodicals, articles, research papers, industry papers.   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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