Modification history

|  |  |
| --- | --- |
| Release | Comments |
| Release 2 | This version released with FBP Food, Beverage and Pharmaceutical Training Package version 2.0. |

| FBPFST4021 | Carry out sampling and testing of milk at receival |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to carry out sampling and testing procedures for milk received from farm as the first operation in market milk processing or the manufacturing of milk based products.This unit applies to individuals who are responsible for receiving and testing milk from the dairy farm, who often work independently, using discretion and making judgements where required. 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. Implement and monitor personal hygiene standards | 1.1 Ensure that personal hygiene meets the requirements of the food safety program for milk receival and handling1.2 Identify and report risks to food safety1.3 Wear clothing and footwear appropriate for testing and handling milk to meet the requirements of the food safety program1.4 Comply with the food safety program when moving around the milk processing plant |
| 2. Carry out standard tests to determine the blending and further processing requirements of milk | 2.1 Implement procedures for receiving and handling milk2.2 Comply with requirements and procedures for milk testing2.3 Sample milk using sampling procedures2.4 Prepare and operate milk testing equipment2.5 Record and store data in required format2.6 Interpret results to determine that milk is within compositional and quality requirements |
| 3. Respond to issues of contamination or other forms of non-conformance in the receival of fresh milk | 3.1 Identify procedures for taking corrective action3.2 Implement corrective and preventative measures where required3.3 Devise or revise procedures to support control measures3.4 Identify processes or conditions that could result in a breach of procedures and corrective actions3.5 Control process changes so that quality assurance requirements are accomplished |
| 4. Review sampling, handling and testing procedures for fresh milk | 4.1 Identify product sampling procedures4.2 Identify post collection procedures4.3 Review test results and respond to issues  |

| Foundation SkillsThis 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. |
| --- |
| Skill | Description |
| Reading  | * Interprets food safety guidelines and regulations
* Interprets product quality and workplace procedures
 |
| Navigate the world of work | * Monitors adherence to legal and regulatory standards and responsibilities for self and others
* Takes responsibility and ownership for own work
 |

|  |
| --- |
| Unit Mapping Information |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPFST4021 Carry out sampling and testing of milk at receival | FDFFST4021A Carry out sampling and testing of milk at receival | Updated to meet Standards for Training PackagesMinor changes to Performance Criteria to clarify intent | Equivalent unit |

|  |  |
| --- | --- |
| 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 FBPFST4021 Carry out sampling and testing of milk at receival |
| --- | --- |
| 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 safely and effectively carried out accurate sampling and testing of milk at receival on at least two occasions.  |

| 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:* the different types of market milk and related products
* proximate analysis profiles for milk from different commercial species of animals
* the properties of milk fats and spoilage reactions in milk fats
* the characteristics and importance in further processing of the two types of milk proteins
* the impact of nutrition and genetics on protein to fat (P:F) ratios
* the mineral composition of milk and relationship between mineral and protein, fat and lactose levels
* the types of microorganisms present in fresh milk and their impact on milk storage and processing characteristics
* characteristics and food safety implications of antibiotic residues and mastitic milk
* nutrients and micronutrients levels in fresh milk as a source of human nutrition
* pathogenic organisms in fresh milk and processing and environmental controls
* the importance of trace antibiotics in milk in effecting market milk and milk for further processing
* the characteristics of mastitic milk and its impact on market milk and milk for further processing
* hygiene procedures for handling fresh milk
* sampling procedures
* raw milk quality tests
* interpretation of raw milk test results
* work health and safety hazards and controls relating to work processes.
 |

| Assessment Conditions |
| --- |
| 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 milk receival facility
* resources, equipment and materials:
* production process and related equipment, manufacturers’ advice and operating procedures
* milk testing equipment
* milk samples from different sources
* methods and related software systems for collecting data
* 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. |

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