



Australian Government

FBPFST5029 Implement and review manufacturing, packaging and testing of beverage products

Release: 1

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Modification History

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

Application

This unit of competency describes the skills and knowledge required to implement and review processes for manufacturing, packaging and testing of beverage products.

This unit applies to individuals who use knowledge of food science and processes to assess product safety, quality and efficiency of production processes in the beverage sector.

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.

Pre-requisite Unit

Nil

Unit Sector

Food science and technology (FST)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Produce a range of beverage product samples	1.1 Source raw materials for production of beverage 1.2 Select and prepare equipment for beverage production 1.3 Implement pre-treatments for beverage production 1.4 Identify and use permissible additives and preservatives 1.5 Identify data requirements for food safety, quality and production

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	standards 1.6 Establish data collection points consistent with equipment capabilities and data requirements 1.7 Use appropriate processing techniques and technologies to produce a range of beverage product samples 1.8 Identify or develop procedures to deal with non-conformance in relation to process and the final product 1.9 Produce sample products using appropriate hygiene and sanitation techniques
2. Review packaging of beverage products	2.1 Identify packaging requirements for beverage products and confirm they are consistent with regulatory, client and company requirements 2.2 Implement or supervise test packaging of the product and check for safety and conformance to client and company requirements
3. Assess the quality, safety and shelf life of a range of beverage products	3.1 Carry out testing techniques including sensory analysis to assess the safety, quality and shelf life of the product 3.2 Identify and assess all common hazards and critical control points (CCPs) for the production of products
4. Review production processes	4.1 Review the CCPs and critical limits for product safety 4.2 Review operating procedures to ensure safe work, food safety and quality 4.3 Review the environmental impacts and associated costs for processing of food products 4.4 Update production processes where necessary

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.

Skill	Description
Reading	Interpret food safety guidelines and regulations

Skill	Description
	Interpret product specifications, quality and workplace procedures
Numeracy	- Maintain and analyse data resulting from testing of products - Determine calibration procedures and schedule for test equipment
Navigate the world of work	Monitor adherence to legal and regulatory standards and responsibilities for self and others
Interact with others	Clarify the purpose and possible actions to be taken as a result of work-related communications

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFST5029 Implement and review manufacturing, packaging and testing of beverage products	FDFST4053A Implement and review manufacturing, packaging and testing of beverage products	Updated to meet Standards for Training Packages Minor changes to Performance Criteria to clarify intent Unit code updated to reflect AQF level	Equivalent unit

Links

Companion Volume Implementation Guides are found in VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPFST5029 Implement and review manufacturing, packaging and testing of beverage products

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Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented and reviewed manufacturing, packaging and testing of at least two beverage products, including:

- selecting and sourcing raw materials for processing beverages
- preparing a detailed production flow chart for beverage production
- determining data collection requirements for safety and quality monitoring
- conducting product sampling
- applying and interpreting a range of quality tests used in the manufacture of beverages, including brix, acidity, alcohol content determination, sulphur dioxide determination, carbonisation level, sensory evaluation and packaging integrity
- analysing test results
- monitoring compliance of processing procedures with food safety and quality requirements
- interpreting critical control points (CCPs) and critical limits
- reviewing quality procedures based on product testing.

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 range of beverage products, including beers, spirits, fruit juice products, carbonated beverages, fortified non-alcoholic beverages, tea and coffee
- the different styles of beers generally manufactured
- the different types of fruit juice products generally manufactured
- manufacturing process for the production of various types of fruit juices
- additives and preservatives used in different types of beverages
- manufacturing processes for a variety of carbonated and non-carbonated beverages

- the variety of styles of teas and coffees generally available
- manufacturing processes for the production of various styles of tea and coffee
- common spoilage and food poisoning organisms associated with beverage production
- brewing processes used in the production of various styles of beverages
- fermentation processes in various styles of beverage production
- quality tests used in the manufacture of beverages, including brix, acidity, alcohol content determination, sulphur dioxide determination, carbonisation level, sensory evaluation and packaging integrity
- stages of production, CCPs and critical limits for production processes
- packaging procedures
- regulatory requirements associated with processing beverages
- environmental impacts of the processing operation
- health and safety hazards in the workplace 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 real 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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