



Australian Government

FBPFST5014 Implement and review the production of chocolate products

Release: 1

FBPFST5014 Implement and review the production of chocolate products

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 the preparation and manufacture of chocolate products.

This unit applies to individuals who are responsible for maintaining product safety, quality assurance and production management. The individual is required to use knowledge of food science and processes to determine the required food safety, quality and performance from food production equipment.

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. Prepare for the manufacture of chocolate products	1.1 Identify the statutory compositional requirements for the different types of chocolate products 1.2 Select the required formulation and design of chocolate products 1.3 Select the appropriate production system and a sequence of

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	activity to prepare the system for operation 1.4 Prepare equipment and access safe operating procedures for its operation
2. Monitor the manufacture of chocolate products to ensure quality standards are met	2.1 Source bulk chocolate to meet the product specifications 2.2 Implement the production schedule, ensuring 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 Interpret and document data requirements and collection points for food safety, quality and production standards 2.5 Implement and monitor procedures to deal with non-conformance in relation to process and the final product 2.6 Implement and monitor process control systems
3. Diagnose, rectify and report problems arising from the preparation and manufacture of chocolate products	3.1 Implement a sampling plan to produce samples for analysis 3.2 Establish sensory evaluation and product testing protocols to identify defects and maintain organoleptic quality of product 3.3 Implement adjustments to inputs, process and equipment in response to analysed results 3.4 Report problems to designated person
4. Review production processes	4.1 Review the critical control points and critical limits for product safety 4.2 Review the operating procedures and the process control system for food safety and quality 4.3 Review the safe work systems for processing 4.4 Review 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.

Skill	Description
Reading	- Interpret food safety guidelines and regulations - Interpret product quality and workplace procedures
Writing	- Develop procedures for implementing and monitoring a product quality system - Document review of a production system
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

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFST5014 Implement and review the production of chocolate products	FDFST4033A Implement and review the production of chocolate 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 FBPFST5014 Implement and review the production of chocolate 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 effectively implemented and reviewed the production of at least two chocolate products, including:

- selecting, planning and implementing the production processes to manufacture chocolate products
- monitoring the output of each of the processes used in the preparation and manufacture of chocolate products
- recognising the organoleptic properties of different types of chocolate products
- determining testing protocols for quality assessment
- operating equipment and accessories used for the preparation and manufacture of chocolate products
- completing data collection and documentation required for quality control
- assessing production procedures against food safety and quality requirements
- identifying defects during production and of final products, and rectifying issues.

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 statutory compositional requirements for the different types of chocolate products
- types of chocolate and compound chocolate and the ingredients used to manufacture each
- critical factors in the preparation and manufacture of chocolate products
- forming processes used in the manufacture of chocolate products, including enrobing, moulding (shell, one-shot, pocket), hollow goods moulding ('spinning'), drop depositing and cluster depositing
- the role of tempering, especially with regard to chocolate, and its relationship to key product attributes including shine, bloom formation, snap, hardness and shrinkage

- the rheological properties (plastic viscosity and yield value) of liquid chocolate and their relationship to the forming process use
- the role of the major ingredients found in chocolate products
- the production system for the preparation and manufacture of chocolate 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
- cooling processes used for chocolate and compound chocolate
- identification of defects during production and of final product stages of production, critical control points and critical limits
- resource requirements and environmental impacts of the preparation and manufacture of chocolate products
- product defects and their causes, which may arise in the preparation and manufacture of chocolate products
- quality and continuous improvement processes
- sensory analysis techniques
- health and safety in the workplace 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 real chocolate manufacturing 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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