



Australian Government

FBPFST5028 Implement and review the manufacturing and processing of edible fats and oils

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 the manufacture and processing of edible fats and oils, based on the preparation of product samples.

This unit applies to food science and technology personnel who have roles in product design, quality assurance and production management. The unit typically applies to staff who have responsibility for maintaining product safety, quality and efficiency in food production in the edible fats and oils 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. Review preparation of plant and animal products for oil	1.1 Identify processing stages for preparation of products 1.2 Establish the principles of pre-treatments for fat and oil processing

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
extraction and processing	1.3 Establish regulatory, quality and safety requirements 1.4 Conduct test runs of the manufacturing process and check product against requirements
2. Monitor processing techniques and technologies to produce fat or oil product	2.1 Identify processing techniques and technologies used to produce edible fats and oils 2.2 Identify the steps involved in the manufacture of the product 2.3 Apply appropriate hygiene and sanitation practices 2.4 Identify data requirements appropriate for food safety, quality and production standards 2.5 Manufacture edible fats and oils according to specifications 2.6 Establish data collection points consistent with equipment capabilities and data requirements 2.7 Implement procedures to deal with non-conformance in relation to process and the final product
3. Review packaging of fat and oil products	3.1 Identify suitable packaging and storage requirements for the products and check against regulatory, client and company requirements 3.2 Undertake test packaging of products and check for safety and conformance to client and company requirements
4. Assess the quality, safety and shelf life of fats and oil products	4.1 Carry out tests to assess the safety and quality and to determine the shelf life of the product 4.2 Conduct sensory analysis to confirm product quality 4.3 Identify and assess all common hazards and critical control points (CCPs) for the production of products
5. Review production processes	5.1 Monitor and review the critical control points (CCPs) and critical limits for product safety 5.2 Review operating procedures for food safety and quality 5.3 Review the production plan against company and client schedules and quality requirements 5.4 Review environmental impacts and associated costs for processing of food products 5.5 Rectify or report issues arising with production processes

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
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
FBPFST5028 Implement and review the manufacturing and processing of edible fats and oils	FDFST4052A Implement and review the manufacturing and processing of edible fats and oils	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 FBPFST5028 Implement and review the manufacturing and processing of edible fats and oils

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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 the manufacturing and processing of at least one edible fat or oil product, including:

- reviewing the various methods of storage that assist to prolong the shelf life of fats and oils
- using processing techniques, utilising commercial materials and equipment
- carrying out product testing
- monitoring compliance of processing procedures with food safety and quality requirements
- diagnosing, rectifying and/or reporting problems and non-compliances arising from the preparation and production of animal- and plant-based fats and oils
- interpreting critical control points (CCPs) and critical limits.

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:

- widely available animal- and plant-based fats and oils and seasonal availability
- the physiological and chemical changes that can occur in fats and oils during harvest, transport and further processing
- various methods of storage that assist in prolonging the shelf life of animal- and plant-based fats and oils
- processing techniques and technologies used to produce animal- and plant-based fats and oils
- testing techniques used to identify quality and safety parameters of edible fats and oils
- packaging requirements for edible fats and oils
- sensory analysis parameters for edible fats and oils
- common spoilage reactions associated with fats and oils

- manufacturing processes for a range of fats and oils
- the physiology and chemistry of edible fats and oils
- methods of storage for edible fats and oils
- regulatory, quality and safety requirements relating to the production of fats and oils
- CCPs and critical limits at each stage of the production process
- 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 food production 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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