



Australian Government

FBPTEC4005 Apply an understanding of food additives

Release: 1

FBPTEC4005 Apply an understanding of food additives

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 recognise the characteristics and functions of food additives, preservatives, colours and flavours used in food products.

The unit applies to individuals who work with food additives in a food production environment. It is designed to provide an overview of food additives. It is not designed to meet the competency requirements of the person who specifies additives, preservatives, colours or flavours to be used in food. Analysis of the properties of food additives may also be done by a specialist.

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

Technical (TEC)

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. Investigate the use of additives in food	1.1 Identify types and groupings of food additives used in food products 1.2 Explain functions of food additives

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Research legal requirements relating to use of food additives 1.4 Explain legal and quality consequences of incorrect additive addition
2. Manage use of additives in a production process	2.1 Identify additives types and groupings used in workplace product range 2.2 Determine and apply suitable methods of application of food additives to meet production requirements 2.3 Establish or review procedures for safe storage, handling and application of food additives 2.4 Conduct handling, use and disposal of additives in accordance with safety and environmental standards

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	- Critically analyse documentation regarding food additive and legal implications from a variety of sources - Read, review and evaluate policies and procedures relating to food additives
Writing	Record outcomes of research work, and review and modify documentation using industry relevant terminology
Numeracy	Perform mathematical calculations for analysing food additive application rates

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPTEC4005	FDFTEC4005A	Updated to meet	Equivalent unit

Apply an understanding of food additives	Apply an understanding of food additives	Standards for Training Packages Minor changes to Element and Performance Criteria for clarity	
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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 FBPTEC4005 Apply an understanding of food additives

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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 applied an understanding of food additives on at least one occasion, including:

- researching food additives and their legal and quality implications
- identifying main additives and their groupings used in at least two different processed food items
- using suitable methods to apply food additives and record their usage
- reviewing procedures for safe storage, handling and applying of additives to products to ensure product safety and quality standards are achieved.

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:

- how common food additives are grouped according to their function
- range of additives under each grouping, including:
 - texture modifying agents
 - organoleptic and nutritional modifying agents
 - shelf-life enhancing agents
 - technological aid
- range of additives used in workplace products
- coding system(s) for describing additives
- legal requirements relating to additives as established by relevant food safety legislation
- Food Standards Code
- typical quantities of additives used and related units of measurement
- preparation requirements, including forming and breaking emulsions and preparation of solutions

- systems and equipment for applying additives
- work health and safety (WHS) issues related to handling of additives
- consequences of incorrect additive addition, including quality and food safety hazards related to incorrect addition
- handling and processing conditions that affect the characteristics of products
- requirements for recording use of additives.

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 workplace conditions
- resources, equipment and materials:
 - product range related to production process
 - additives used in the workplace product range, including preservatives, colours and/or flavours
- specifications:
 - relevant food safety legislation
 - information about current workplace requirements and procedures for additive use.

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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