



Australian Government

FBPTEC3006 Work with flours and baking additives

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to work with different types of grains, flours and leavening agents that are used to produce bakery products, including bread, pastries, cakes and biscuits.

Users should note that other baking ingredients such as eggs, sugar, fats and oils, nuts and dried fruit are included in FBPTEC3005 Work with bakery ingredients, their functions and interactions.

This unit applies to individuals who work in commercial or high volume bakeries. It typically applies to the production worker responsible for producing baked products, where a knowledge of ingredients and how they react during processing is essential for maintaining product quality and consistency and will assist with identifying common processing faults and the corrective actions to be applied.

All work must be carried out to comply with workplace procedures according to state/territory health and safety and food safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

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>

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1. Identify different flour types, their properties and uses	1.1 Identify characteristics of flour produced from different grains 1.2 Identify the purpose of flour in bakery products 1.3 Identify each component of flour, including protein quality and quantity, fibre content, starch levels and damaged starch, fats/oils, natural sugars and moisture contents 1.4 Identify the different types and/or grades of flour available to produce baked products 1.5 Identify storage requirements of flour to maintain quality 1.6 Recognise common faults that can occur in baked products that are related to flour 1.7 Identify common food safety hazards and allergies related to flour 1.8 Determine the hazards related to working with flour, and how the associated risks can be managed
2. Work with leavening agents	2.1 Identify different types of leavening agents and how they ferment in the baking process 2.2 Recognise the impact of leavening agents on baked products 2.3 Identify the storage requirements for leavening agents to ensure viability 2.4 Recognise the various ways that leavening agents can be used in baked products 2.5 Recognise common faults that can occur in baked products that are related to fermentation 2.6 Identify common food safety hazards related to leavening agents and fermentation 2.7 Determine the hazards related to working with leavening agents, and how the associated risks can be managed
3. Work with bakery additives	3.1 Identify typical additives that are used to produce baked products 3.2 Recognise the purpose of different additives and their effect on baked products 3.3 Identify the storage requirements for bakery additives to ensure viability 3.4 Recognise common faults that can occur in baked products that are related to additives 3.5 Identify common food safety hazards related to bakery additives,

Elements	Performance Criteria
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	and how they are controlled 3.6 Determine the hazards related to working with bakery additives, and how the associated risks can be managed

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
Learning	Problem-solve issues with baking process and ingredients to ensure quality outcomes
Reading	Interpret key information from Product Information Forms (PIFs), labels, Certificates of Analyses and workplace documents
Oral communication	Use industry terminology when referring to ingredients and their properties

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPTEC3006 Work with flours and baking additives	Not applicable	The unit has been created to address a skill or task required by industry that is not covered by an existing unit	Newly created

Links

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

Assessment Requirements for FBPTEC3006 Work with flours and baking additives

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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 identified the functions and properties of flours and baking additives, including for:

- at least two different types of flour
- at least two different leavening agents, and
- at least two different additives.

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:

- different flours and their uses and suitability for different baked products:
 - baker's or strong flour
 - wholemeal flour
 - weak flours
- characteristics and differences in flour produced from a variety of new and ancient grains, and the cultivation required for successful propagation of the different crops
- general physical-chemical properties of common flours, including protein quality and quantity, fibre content, starch levels and damaged starch, fats/oils, natural sugars and moisture contents, and the impact that differing properties have on processing and finished product
- key properties of wet and dry leavening agents and how each should be stored to maintain health, viability and integrity
- principles of fermentation
- typical additives used in baking, and their purpose
- storage requirements to ensure quality of product is maintained, including the effects of temperature, moisture, contamination from other materials, allergen management, pest control

- typical analytical tests and checks to determine quality of flour and additives, including observation, smell and rapid tests
- typical faults that occur in baked products as a result of flour and additive ingredient treatment or integrity
- the purpose and intent of food safety legislation and control measures for physical, chemical, microbiological and allergenic risks
- Food Standards Code in relation to product and site
- Common microbiological, physical, chemical and allergenic hazards that can occur when processing baked products, including the types of hazards likely to occur, the conditions under which they occur, and possible consequences
- contamination/cross-contamination and cross-contact food safety risks associated with flour and additives used in a commercial bakery, and how each can be controlled
- cleaning and sanitisation procedures for ingredients containing allergens.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a bakery setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - a variety of flours and additives
- specifications:
 - information on food safety
 - access to Food Standards Code
 - ingredient information.

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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