



Australian Government

FBPRBK4004 Develop baked products

Release: 1

FBPRBK4004 Develop baked products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to apply baking techniques to develop baked products in a commercial baking environment.

This unit applies to individuals who apply a broad range of specialised knowledge and skills with responsibility for their own work. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

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

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

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. Identify product development opportunity	1.1 Research baked product trends to identify opportunities for new product development for local market 1.2 Review current baked product range to identify opportunities for improving products and processes 1.3 Evaluate identified opportunities to define and document product

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	development purpose and concept
2. Specify development requirements	2.1 Interpret product development concepts to prepare product specifications 2.2 Develop and document draft recipes to meet product specifications and Food Standards Code 2.3 Adjust draft recipes to meet special dietary, cultural or religious needs 2.4 Select processes and develop draft process specifications and production work flow to meet product specifications 2.5 Estimate product costings using draft recipes and draft process specifications
3. Prepare for production trials	3.1 Schedule and confirm availability of equipment to meet draft process specifications 3.2 Identify ingredients to meet draft recipes and check to confirm quality and quantity 3.3 Identify equipment and resource constraints, and resolve according to workplace procedures 3.4 Identify and assess food safety and workplace health and safety risks, and determine risk controls
4. Conduct production trials	4.1 Produce trial products using draft recipes and process specifications 4.2 Implement and monitor food safety and workplace health and safety risk controls 4.3 Monitor production trial to identify production trial problems and rectify 4.4 Record production trial process data according to workplace procedures 4.5 Evaluate trial products against product specifications to identify non-conformances 4.6 Interpret process data and trial product evaluation results to adjust recipes and process variables, and coordinate successive production trials to meet product specifications 4.7 Record production trial variables and results according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Confirm product development	5.1 Schedule and reproduce product to confirm recipe and process specification 5.2 Assess suitability of existing packaging supplies for final product packaging 5.3 Evaluate final product to verify product specifications and food safety requirements are met 5.4 Calculate final product cost using final recipes and process specifications 5.5 Determine product pricing and confirm commercial viability

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	Builds on knowledge of baking products and processes based on production trial outcomes
Reading	Sources and interprets a range of technical baking industry texts to determine relevance and usefulness for product development
Writing	Prepares recipes, production trial records and process and product specifications using structure, technical language and format appropriate to purpose
Numeracy	- Extracts and interprets mathematical information embedded in technical baking industry texts - Interprets financial information, including fixed and variable costs, profit margins and sale price ranges - Performs calculations to develop and adjust recipes using baking formulas - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes and determine size of packaging for product - Interprets measurement information to set, monitor and adjust process parameters - Uses mathematical symbols and conventions to document recipes,

Skill	Description
	production trial records, and process and product specifications
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Uses problem-solving skills to evaluate production trial outcomes and decide on appropriate action - Takes responsibility for planning, organising and implementing tasks required to achieve required outcomes - Uses digital technologies to set process parameters

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4004 Develop baked products	FDFRB3017A Participate in product development	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDDR4006A Explore and apply baking techniques to develop new products	Redesigned unit that includes content from the previous unit	No equivalent unit

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 FBPRBK4004 Develop baked 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 developed one of the following baked products, using a minimum of eight ingredients and applying a pre- or post-baked finish component:

- a specialty bread
- a cake based product
- a pastry-based product.

The activities to develop the baked product must include:

- researching product and process development opportunities
- meeting one of the following six purposes:
 - identified market opportunity
 - cost saving for current product
 - healthy eating improvement for current product
 - time and labour improvement for current product
 - product quality improvement for current product
 - a special dietary, cultural or religious need
- preparing trial recipes
- conducting at least one production trial
- evaluating the final product to verify the following seven technical qualities of the product:
 - flavour style
 - moisture
 - structure
 - taste
 - symmetry

- appearance
- aroma
- assessing the potential commercial viability of the product, including the following four considerations:
 - cost price versus final sales price
 - local market suitability
 - suitability of packaging and transport
 - compliance with food safety code regulatory requirements for the product and its ingredients.

The individual must prepare a final report that includes the following information:

- product development purpose and concept
- description of the special dietary, cultural or religious need
- production trial variables and results
- final product specification, including product assembly and presentation
- final product recipe
- final process specification
- final production work flow
- final product costing
- final product price.

The individual must reproduce the final product within operational constraints where the maximum waste is less than 5% of the weight of the production schedule.

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:

- workplace health and safety requirements, including personal protective equipment, applicable to developing baked products and operating baking equipment
- regulatory requirements for food applicable to developing baked products
- identifying and evaluating product development opportunities
- purposes of product development, including:
 - meeting identified market opportunity
 - cost saving to current product
 - healthy eating improvement to a current product
 - time and labour improvement to a current product
 - product quality improvement to a current product
 - a special dietary, cultural or religious need
- commercial viability considerations used in product development, including:
 - addressing market or business opportunity

- producing within operational constraints
- cost price versus final sales price
- local market suitability
- suitability of packaging and transport
- types of production trial problems, including:
 - increased ingredient costs
 - non-availability of ingredients
 - equipment breakdown
 - labour shortages
- nature of special dietary requirements and gluten intolerance as it relates to developing baked products, including:
 - eggs
 - fish
 - milk
 - peanut
 - sesame
 - shellfish
 - soy
 - tree nuts
 - wheat
 - food allergy or food intolerance
- nature of cultural needs as they relate to developing baked products, including:
 - Australian
 - Asian
 - Indian
 - Middle Eastern
 - South European
 - African
- nature of religious needs as they relate to developing baked products, including:
 - Buddhism
 - Hinduism
 - Islam
 - Judaism
 - Christianity
- purpose and content of product development documentation, including:
 - product development purpose and concept
 - description of the special dietary, cultural or religious need
 - production trial variables and results
 - final product specification, including product assembly and presentation
 - final product recipe

- final process specification
- final production work flow
- final product costing
- final product price
- interaction of ingredients and processing variables and their effect on the quality of the final product, including:
 - product formulas
 - process parameters
- product evaluation, including:
 - flavours
 - moisture
 - structure
 - taste
 - symmetry
 - appearance
 - aroma
- techniques for determining product packaging and presentation for baked product development
- using industry standard terminology relevant to baked product development.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
 - local market for which product is to be developed
 - commercial bakery resources, equipment and materials suitable for the development of baked products
 - ingredients that meet baked product requirements
- specifications:
 - food standard code regulatory requirements applicable to developing baked products
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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