



**Australian Government**

# **FBPRBK3004 Produce meringue products**

**Release: 1**

## FBPRBK3004 Produce meringue 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 produce meringue products in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable 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. Prepare for work                              | 1.1 Confirm product types and volumes to schedule production<br>1.2 Calculate yield and adjust recipe to meet production volume<br>1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements |

| <b>Elements</b>                                  | <b>Performance Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                       |
|                                                  | 1.4 Select and wear personal protective equipment according to safety requirements<br>1.5 Select meringue equipment and check to confirm readiness for use<br>1.6 Select ingredients and check to confirm quality and quantity                                                                                                                                                                                               |
| 2. Mix meringue batter                           | 2.1 Measure ingredient quantities to meet recipe specifications<br>2.2 Load meringue ingredients into mixer in required sequence<br>2.3 Operate and monitor mixer to mix batter for optimum meringue aeration for product type<br>2.4 Fold in ingredients as required to meet meringue product type<br>2.5 Check meringue to identify batter faults and rectify                                                              |
| 3. Process meringue products                     | 3.1 Deposit, spread and pipe meringue batter to prepare gateaux and desserts as required for product type<br>3.2 Fold meringue batter through gateaux, dessert fillings and bases as required for product type<br>3.3 Use sight and feel to assess meringue quality<br>3.4 Check processed meringue to identify faults and rectify                                                                                           |
| 4. Bake meringue products                        | 4.1 Deposit, spread and pipe batters into tins and trays as required for product type<br>4.2 Set baking temperatures and times to suit meringue product type and size<br>4.3 Load oven and monitor baking to achieve bake required for meringue product type<br>4.4 Use sight and feel to assess bake of meringue products<br>4.5 Unload meringue products to cool<br>4.6 Check meringue bake to identify faults and rectify |
| 5. Prepare finishing mediums                     | 5.1 Assemble finishing ingredients and equipment and prepare for use<br>5.2 Measure finishing ingredient quantities to meet recipe specifications<br>5.3 Operate and monitor mixer to prepare creams and icings as required for product type<br>5.4 Prepare chocolate for decorating as required for product type                                                                                                            |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                              |
|                                                  | 5.5 Prepare garnishes for decorating as required for product type<br>5.6 Prepare piping bags to pipe finishing decorations<br>5.7 Check finishing mediums to identify faults and rectify                                                                                                                                                                                                                                                                                            |
| 6. Finish meringue products                      | 6.1 Finish meringue products to meet product type, and transfer to presentation containers<br>6.2 Apply creams to finish meringue products as required for product type<br>6.3 Apply garnishes and decorating finishes to decorate meringue product as required for product type<br>6.4 Check finished meringue products to identify faults and rectify<br>6.5 Prepare and transfer products for presentation and storage in accordance with packaging and food safety requirements |
| 7. Complete work                                 | 7.1 Clean equipment and work area to meet housekeeping standards<br>7.2 Dispose of waste according to workplace requirements<br>7.3 Complete workplace records according to workplace requirements                                                                                                                                                                                                                                                                                  |

## 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  | <ul style="list-style-type: none"> <li>Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications</li> </ul>                                                                                                                                                                                                                                                                         |
| Writing  | <ul style="list-style-type: none"> <li>Prepares production schedules and completes production records using required format, language and structure</li> </ul>                                                                                                                                                                                                                                                                                               |
| Numeracy | <ul style="list-style-type: none"> <li>Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels and temperature and timer settings</li> <li>Estimates approximate quantities and uses equipment to measure ingredient weights and volumes</li> <li>Performs calculations to adjust recipes using baking formulas, and allows for wastage</li> <li>Uses understanding of three-dimensional shapes to shape products</li> </ul> |

| Skill                      | Description                                                                                                                                                                                                                                                      |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | <ul style="list-style-type: none"><li>and check end-product shapes</li><li>• Interprets measurement information to set, monitor and adjust process parameters</li><li>• Completes production records using mathematical symbols and conventions</li></ul>        |
| Navigate the world of work | <ul style="list-style-type: none"><li>• Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation</li><li>• Follows organisational policies and procedures relevant to own work role</li></ul> |
| Get the work done          | <ul style="list-style-type: none"><li>• Plans, organises and implements tasks required to achieve production outcomes</li><li>• Uses problem-solving skills to analyse product and process faults and decide on appropriate action</li></ul>                     |

## Range of Conditions

*This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.*

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Meringue equipment must include: | <ul style="list-style-type: none"><li>• equipment, including:<ul style="list-style-type: none"><li>• industrial mixer and attachments</li><li>• industrial cook tops</li></ul></li><li>• equipment accessories, including:<ul style="list-style-type: none"><li>• cake whisk attachment</li></ul></li><li>• ancillary equipment, including:<ul style="list-style-type: none"><li>• cake hoops or tins</li><li>• chocolate melting equipment</li><li>• cook pots</li></ul></li><li>• tools and utensils, including:<ul style="list-style-type: none"><li>• pallet knives</li><li>• scrapers</li><li>• cake knives</li><li>• piping bags</li><li>• piping nozzles.</li></ul></li></ul> |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Unit Mapping Information

| Code and title<br>current version             | Code and title<br>previous version                  | Comments                                                                                                                                                                                     | Equivalence status |
|-----------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| FBPRBK3004<br>Produce<br>meringue<br>products | FDFRB2003A<br>Produce<br>meringue-based<br>products | Redesigned units with<br>significant changes to<br>elements and<br>performance criteria<br><br>AQF level changed to<br>reflect the added<br>variety and complexity<br>of the unit's outcomes | 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 FBPRBK3004 Produce meringue products

## Modification History

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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 produced meringue products according to the production schedule, including:

- producing the following three meringue types:
  - French meringue using cold meringue method
  - Swiss meringue using warm meringue method
  - Italian meringue using hot meringue method
- producing the following four meringue-based products:
  - meringue-based gateaux or torte
  - meringue garnish or figurine
  - meringue-based confection
  - meringue-based dessert
- using the following three creams and icings:
  - chocolate ganache
  - chocolate glaze
  - butter cream
- using the following four decorated finishes:
  - fruit decorated
  - cream decorated
  - chocolate decorated
  - scorched meringue
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following six considerations:
  - timings
  - volume requirements

- product processing requirements
- meringue product finishing requirements for product type
- recipe reformulation to minimise waste
- bake parameters for meringue product type.

Wastage that cannot be reused in production must be less than 5% of the weight of the original 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 (PPE), applicable to producing meringue products
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing meringue products
- considerations for production scheduling, including:
  - timings
  - volume requirements
  - product processing requirements
  - meringue product finishing requirements for product type
  - recipe reformulation to minimise waste
  - bake parameters for meringue product type
- characteristics and processes of meringue types, including:
  - French meringue using cold meringue method
  - Swiss meringue using warm meringue method
  - Italian meringue using hot meringue method
- types of meringue-based products, including:
  - meringue-based gateaux and tortes
  - meringue garnish
  - meringue-based confection
  - meringue figurine
  - meringue-based dessert
- using butter creams, ganache and glazes, including:
  - chocolate ganache
  - chocolate glaze
  - butter cream
- types, functions and characteristics of ingredients used in meringue products production, including:
  - reaction of fat against protein in meringue

- eggs
- sugar
- processes for producing meringue products, including:
  - mixing physically aerated
  - piping meringue
  - baking
  - whisking
  - boiling
  - scorching
  - drying
- requirements for finishing, including:
  - decorating mediums to suit finishing
  - preparing ganache and glazes
  - melting chocolate
  - using meringue for garnishes
- purpose and functions of production settings, including:
  - oven temperatures for meringue batter type and volume
  - baking times for meringue batter type and volume
- techniques for testing bake of meringue by feel and sight
- required characteristics of meringue products, including:
  - softness
  - firmness
  - sweetness
  - stability
- causes and corrective action for predictable and sometimes unpredictable meringue production problems, including:
  - machinery failure
  - environmental factors, including heat, humidity and cold
  - poor quality ingredients
- meringue product terminology.

## 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
- resources, equipment and materials:
  - personal protective equipment
  - equipment specified in the range of conditions

- industrial oven
- trays
- ingredients that meet the meringue product types required in the performance evidence
- specifications:
  - recipes that meet the meringue product types required in the performance evidence
  - end-product quality specifications to meet the meringue product types required in the performance evidence
  - food safety code regulatory requirements applicable to producing meringue 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.

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