

Title	Prepare marshmallow and egg white based bakery products		
Level	4	Credits	4

Purpose	<p>This unit standard is for people working or intending to work in a bakery.</p> <p>People credited with this unit standard are able to: use safe working practices; prepare and weigh and/or measure ingredients; mix ingredients for meringue; cook marshmallow ingredients; pipe marshmallow and meringue products; dry meringue products; and finish novelty marshmallow and meringue products.</p>
----------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Classification	Food and Related Products Processing > Baking
-----------------------	-----------------------------------------------

Available grade	Achieved
------------------------	----------

Entry information	
Recommended skills and knowledge	Unit 29069, <i>Demonstrate knowledge of and comply with health and safety, and food safety practices in a commercial bakery</i> ; and Unit 29070, <i>Demonstrate knowledge of legislation, codes, and rules for the production of bakery products</i> ; or demonstrate equivalent knowledge and skills.

Explanatory notes

- References**

Enactments and codes relevant to this unit standard include but are not limited to the: Food Act 1981 and the Food Act 2014; Health and Safety in Employment Act 1992; Health and Safety at Work Act 2015; Resource Management Act 1991; Food (Safety) Regulations 2002; Food Hygiene Regulations 1974; and the Australia New Zealand Food Standards Code, available at <http://www.foodstandards.govt.nz/>.
- Range**

Competence is to be demonstrated on two occasions of preparing marshmallow-based bakery products (at least one of which is a novelty product) and two occasions of preparing egg white based bakery products (at least one of which is a novelty product).

Products may include but are not limited to – conventional meringue, Italian meringue, small and large novelty products, marshmallow-based fancies and slices, pavlovas.

Ingredients may include but are not limited to – egg white (fresh, frozen, dried), sugar, gelatine, flavours, colours, chocolate, jams, jellies.

Equipment may include but is not limited to – mixers, piping bags, ovens, water bath, piping bags, dipping forks.

3 Definitions

Workplace procedures refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out, such as recipes, production specifications, standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality assurance procedures, housekeeping standards, and procedures to comply with legislative and local body requirements.

PPE refers to personal protective equipment such as protective clothing; gloves; safety glasses, headwear, and footwear; hearing protection; and safety devices.

4 Assessment

Evidence generated during assessment against this standard must meet applicable workplace procedures and must be consistent with industry practice. Such knowledge is available in relevant training manuals and reference texts. No one textbook or other source of information is envisaged, as new approaches to commercial baking and baking products are published regularly.

Outcomes and evidence requirements

Outcome 1

Use safe working practices.

Evidence requirements

1.1 PPE is used.

1.2 Work environment is kept clean and free from hazards.

Range hazards to – personnel, product, plant.

1.3 Documentation is referred to and/or completed.

Outcome 2

Prepare and weigh and/or measure ingredients.

Evidence requirements

2.1 Ingredients are checked for shelf life and signs of contamination.

2.2 Ingredients are prepared in accordance with recipe specifications.

Range may include but is not limited to – temperature, separating eggs, hydrating.

2.3 Reactive ingredients are kept separate during preparation.

Range may include but is not limited to – gelatine, egg yolks, egg whites.

- 2.4 Ingredients are accurately weighed and/or measured in accordance with recipe specifications.

Outcome 3

Mix ingredients for meringue.

Evidence requirements

- 3.1 Mixing equipment is selected to suit product and scheduled production.
- 3.2 Mixing equipment is clean, free from contamination, and operational.
- 3.3 Where an Italian meringue is being prepared, sugar and water is heated to required temperature.
- 3.4 Ingredients are mixed at desired speed and for desired time.
- Range cold or Italian.
- 3.5 Sequence and pace of ingredient addition is in accordance with type of meringue produced.
- Range cold or Italian.
- 3.6 Mixed meringue conforms to desired consistency and volume.
- Range cold or Italian.
- 3.7 The mixing equipment is operated according to workplace procedures.
- 3.8 Mixing equipment is cleaned and available in location for next user in accordance with workplace procedures.

Outcome 4

Cook marshmallow ingredients.

Evidence requirements

- 4.1 Equipment is clean, free from contamination, and operational.
- 4.2 Sugar and water are heated to temperature.
- 4.3 Hydrated gelatine is added and dissolved thoroughly.
- 4.4 Sugar, water, and gelatine mixture are whisked to required.
- 4.5 Marshmallow conforms to recipe specifications.

Range may include but is not limited to – consistency, volume, colour, gloss, smoothness.

4.6 The equipment is operated.

4.7 Equipment is cleaned and available in location for next.

Outcome 5

Pipe marshmallow and meringue products.

Evidence requirements

5.1 Piping equipment is clean, free from contamination, and operational.

5.2 Product is available at the temperature and quantity to meet production requirements.

5.3 Piping bag is neatly filled with product and correct diameter nozzle attached.

5.4 Product is piped.

5.5 Piped product complies with product specifications.

Range may include but is not limited to – shape, size, uniformity.

Outcome 6

Dry meringue products.

Evidence requirements

6.1 Oven is clean, free from contamination, and available for drying.

6.2 Oven is operational and set according to recipe specifications.

Range may include but is not limited to – temperature top and bottom, damper controls, time, alarms, fans, gas valves.

6.3 Meringues are dried in accordance with recipe specifications and production schedule.

6.4 Dried meringues conform to product specifications.

Range may include but is not limited to – colour, uniformity of drying, degree of drying, shape, size.

6.5 The oven is operated.

Outcome 7

Finish novelty marshmallow and meringue products.

Evidence requirements

- 7.1 Finishing equipment is selected and operated to suit novelty product and scheduled production.
- 7.2 Finishing equipment is clean, free from contamination, and operational in accordance with workplace procedures.
- 7.3 Finishings are selected and applied in accordance with novelty product specifications.
- 7.4 Finished novelty products conform to product specifications.
- Range may include but is not limited to – size, shape, colour, evenness of colour, uniformity.
- 7.5 Equipment is cleaned and available in location for next user.

Planned review date	31 December 2021
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 November 1998	31 December 2018
Review	2	20 April 2006	31 December 2018
Review	3	17 March 2016	N/A

Consent and Moderation Requirements (CMR) reference	0013
------------------------------------------------------------	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz at qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.