

<b>Title</b>	<b>Demonstrate and apply knowledge of waste reduction in a commercial bakery</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>9</b>

<b>Purpose</b>	<p>This unit standard is for people working or intending to work as a baking tradesperson in a commercial bakery.</p> <p>People credited with this unit standard are able to; identify the factors that contribute to waste in a commercial bakery, describe waste reduction practices in a commercial bakery, and apply waste reduction practices to the baking process.</p>
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<b>Classification</b>	Food and Related Products Processing > Baking
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<b>Available grade</b>	Achieved
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### Explanatory notes

#### 1 Definitions

*Commercial bakery* means a craft, plant, or in-store/franchise bakery.

*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.

#### 2 Assessment information

This unit standard must be assessed in a commercial bakery or in a simulated environment that demands performance equal to that required in a commercial bakery.

Evidence generated during assessment against this standard must meet applicable workplace procedures and must be consistent with industry practice relating to baking science and technology. 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.

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### Outcomes and evidence requirements

#### Outcome 1

Identify the factors that contribute to waste in a commercial bakery.

**Evidence requirements**

- 1.1 The factors contributing to ingredient wastage in a commercial bakery are identified.
- Range identified examples may include – substandard storage, stock rotation, inadequate labelling, incorrect labelling, substandard quality, incorrect selection, non-compliance with recipe.
- 1.2 Human error is explained in terms of its effect on the baking process and creation of waste.
- Range human error relating to – interpreting a recipe, mathematical calculations, weighing ingredients, non-compliance with workplace procedures, misinterpreting a recipe.
- 1.3 The matching of customer demand to bakery production is described in terms of product type and quantity.
- 1.4 The role of production planning is described in terms of its effect on bakery workflow, efficiency, and output.
- Range human resource allocation, equipment and plant utilisation, production scheduling, product mix.
- 1.5 Misuse of equipment is described in terms of consequential damage and downtime.

**Outcome 2**

Describe waste reduction practices in a commercial bakery.

**Evidence requirements**

- 2.1 The role and importance of waste minimisation procedures are explained for a commercial bakery.
- 2.2 The workplace procedures for the management of ingredients to minimise waste are described.
- Range purchasing, quality specifications, labelling, quality checks, storage, processing of substandard ingredients.
- 2.3 The purpose and content of written communications used in the baking industry are described.
- Range written communications – workplace procedures, recipes, work instructions, signs, labels.
- 2.4 The factors that determine the efficiency of a commercial bakery layout are explained.

- 2.5 The principles of production planning to reduce lost time in a commercial bakery are described.
- Range human resource allocation, equipment allocation, job scheduling, contingency planning.
- 2.6 Procedures for reworking non-conforming product and ingredients are described.
- 2.7 The effects of equipment breakdowns on production is explained and procedures to mitigate them are described.

### Outcome 3

Apply waste reduction practices to the baking process.

Range three occasions.

### Evidence requirements

- 3.1 The use of resources for baking process tasks is evaluated and opportunities to meet workplace requirements for waste reduction are identified.
- Range resources may include but are not limited to – time, effort, equipment, materials, work area.
- 3.2 Changes that reduce waste are promoted within the workplace in accordance with workplace procedures.
- Range methods to promote changes may include but are not limited to – verbal suggestion, completing a suggestion form, tabling a proposal at a meeting.
- 3.3 Waste reduction practices are applied to the baking process in accordance with workplace procedures.

<b>Planned review date</b>	31 December 2021
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### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	17 March 2016	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0013
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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.

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**Comments on this unit standard**

Please contact Competenz at [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.