

<b>Title</b>	<b>Test food for spoilage organisms and pathogens</b>		
<b>Level</b>	<b>6</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	People credited with this unit standard are able to: describe contamination of food by microorganisms; test for the presence of food spoiling and food poisoning microorganisms; and explain the role of coliforms in food and methods used to detect them.
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<b>Classification</b>	Science > Microbiology
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 All work must be carried out in accordance with the quality management system, documented protocol system or Standard Operating Procedures (SOP) acceptable in a commercial or research laboratory.
- 2 Health and Safety practices must conform to Australian/New Zealand Standard AS/NZS 2243 – *Safety in Laboratories* Parts 1, 2, 3, 7 and 10 available at <http://www.standards.co.nz>.
- 3 Legislation applicable to this unit standard includes:  
Health and Safety at Work Act 2015;  
Hazardous Substances and New Organisms Act 1996.
- 4 Glossary  
*Laboratory procedures* refer to documented systems or processes of operation which may be found in a SOP manual, quality management system, or in protocol system documentation. These procedures are external and/or internal laboratory requirements governing laboratory work.
- 5 Recommended for entry: Unit 8023, *Demonstrate and apply knowledge of microorganism biochemical pathways*; Unit 8040, *Perform aseptic laboratory techniques*; and Unit 26117, *Work safely in a science laboratory*.

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### Outcomes and performance criteria

#### Outcome 1

Describe contamination of food by microorganisms.

**Performance criteria**

- 1.1 The role of microorganism in contamination is described in terms of food poisoning and food infections.
- 1.2 Preventative methods to reduce contamination are described in terms of the food poisoning and food infections.

**Outcome 2**

Test for the presence of food spoiling and food poisoning microorganisms.

Range methods of testing include – sampling, pre-enrichment, isolation, count; evidence of three food samples is required.

**Performance criteria**

- 2.1 Food samples are tested for the presence of bacteria in accordance with laboratory procedures.

Range bacteria include – food spoiling, food poisoning.

**Outcome 3**

Explain the role of coliforms in food and test for coliform presence.

Range evidence of three methods is required.

**Performance criteria**

- 3.1 The presence of coliforms is explained in relation to their role in food.
- 3.2 A food sample is tested for the presence of coliforms in accordance with laboratory procedures.

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**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	22 December 1996	31 December 2014
Review	2	24 February 1998	31 December 2014
Review	3	23 November 1999	31 December 2014
Review	4	21 May 2010	31 December 2025
Rollover	5	27 January 2015	31 December 2025
Review	6	27 September 2018	31 December 2025
Review	7	30 November 2023	31 December 2025

<b>Consent and Moderation Requirements (CMR) reference</b>	0113
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

This unit standard is expiring