

Title	Describe seafood spoilage mechanisms and control		
Level	4	Credits	10

Purpose	<p>This unit standard is for people working in a seafood operation.</p> <p>People credited with this unit standard are able to describe seafood spoilage mechanisms and control.</p>
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Classification	Seafood > Seafood Processing
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Available grade	Achieved
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Guidance Information

- 1 All evidence presented in this unit standard must be in accordance with:
 - Workplace procedures;
 - Animal Products Act 1999;
 - Food Act 2014;
 - Health and Safety at Work 2015; and any subsequent amendments.

- 2 Definition

Workplace procedures refer to the policies and procedures set out in a verbal or written form by the employer or organisation. Procedures must be consistent with current legislative requirements and manufacturer's recommendations or instructions where relevant.

Outcomes and performance criteria

Outcome 1

Describe seafood spoilage mechanisms.

Range seafood spoilage mechanisms include – stress, rapid rigor mortis, enzymes, bacteria, oxidation, rough handling, dehydration.

Performance criteria

1.1 Describe the effects of the spoilage mechanisms on seafood quality.

Range seafood quality includes but is not limited to – food safety, tissue structure, colour, texture, appearance, odour, flavour.

- 1.2 Describe the impact of the spoilage mechanisms at different stages of processing.
- Range stages of processing may include – catching or harvesting, transporting, chilling, thawing, processing, freezing, cold storage; evidence of four stages is required.
- 1.3 Describe the influence of seasonal changes on the spoilage of seafood, in terms of how they impact on the product’s processing characteristics.
- Range changes include but are not limited to – moisture levels, fat, proteins.

Outcome 2

Describe seafood spoilage control.

Performance criteria

- 2.1 Identify the seafood spoilage mechanisms that are affected by processing control measures.
- Range seafood spoilage mechanisms include but are not limited to – stress, rapid rigor mortis, enzymes, bacteria, oxidation, rough handling, dehydration; control measures – chilling, freezing, handling procedures, hygiene, glazing, packaging, canning, impregnating, smoking, marinating, heat treatment.
- 2.2 Describe the methods used to measure or assess the extent of spoilage in seafood products.
- Range methods include but are not limited to – sensory, chemical, microbiological, physical tests.
- 2.3 Describe the expected shelf life of seafood products stored under different conditions.
- Range products include but are not limited to – chilled, frozen, cooked, vacuum packed, canned, impregnated, marinated, smoked, crumbed and coated, live seafood products.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 January 2001	31 December 2012
Review	2	23 January 2009	31 December 2012
Review	3	18 February 2011	31 December 2020
Review	4	24 January 2019	N/A
Rollover	5	29 February 2024	N/A

Consent and Moderation Requirements (CMR) reference

0123

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

Comments on this unit standard

Please contact the Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.