

Title	Demonstrate knowledge of meat grading classifications and principles of grading technology		
Level	4	Credits	20

Purpose	<p>People credited with this unit standard are able to describe: meat sex classifications; category carcass classifications; the operating principles of devices to measure meat edibility, and the method of determining the calculated lean meat yield (CLMY) equation.</p> <p>They are also able to demonstrate knowledge of: meat weight, fat, and yield classifications; and factors impacting meat edibility.</p>
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Classification	Meat Processing > Meat Quality
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Available grade	Achieved
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Guidance Information

- Legislation relevant to this unit standard includes but is not limited to:
 - Health and Safety at Work Act 2015;
 - Animal Products Act 1999;
 - and any subsequent amendments.
- Resource documents include but are not limited to – *Beef+Lamb New Zealand Reference guide*.
http://www.beeflambnz.co.nz/resources/Reference_Guide.pdf.
 New Zealand Meat – Guide to Beef Carcass Classification
<https://www.interest.co.nz/files/rural/beefgrade.pdf>.
 New Zealand Meat – Guide to Lamb and Mutton Classification
<https://www.interest.co.nz/files/rural/lambgrade.pdf>.
- Definitions

Company specifications – product specifications set by the company relating to cuts, weights, presentation, and packaging.

Customer specifications – product specifications set by clients relating to cuts, weights, presentation, and packaging.

Industry Classifications – as outlined by the New Zealand Meat Classification Authority may include but are not limited to – steer, heifer, cow, vealer, bull, lamb, hogget, mutton, ram, venison, barrow, boar, entire, gilt, sow.

Organisational requirements – instructions to staff on policies and procedures that are documented in memo, electronic, or manual format and available in the workplace.

Outcomes and performance criteria

Outcome 1

Describe meat sex classifications.

Performance criteria

1.1 Describe meat sex classifications in accordance with industry classifications.

Outcome 2

Demonstrate knowledge of meat weight, fat, and yield classifications.

Range evidence of three different weight classes in the learner's workplace is required.

Performance criteria

2.1 Outline each weight class in terms of company and customer specifications.

2.2 Describe fat depth codes and measurements in accordance with industry classifications.

2.3 Identify carcasses eligible by weight, fat depth, and yield classification in accordance with company and customer specifications.

Outcome 3

Describe category carcass classifications.

Range evidence of four category carcass classifications is required.

Performance criteria

3.1 Describe category carcass classifications in terms of company specifications and customer specifications.

3.2 Describe manufacturing category carcass classifications in terms of company specifications and customer specifications.

Range classifications may include but are not limited to – animal condition, sexual development, weight, taint, fat discolouration;

Outcome 4

Demonstrate knowledge of factors impacting meat edibility.

Performance criteria

- 4.1 Describe key factors predisposing Pale Soft Exudative (PSE) meat and Dark Firm Dry (DFD) meat in terms of their impact on the end product.

Range key factors include but are not limited to – pre-slaughter stress, slaughter stress, resting time, acute stress, chronic stress, optimal cooling curves, genotype.
- 4.2 Explain quality implications of PSE meat and DFD meat in terms of the impact on the end product.

Range quality implications include but are not limited to – paleness, drip loss, cooking loss, succulence, keeping quality.

Outcome 5

Describe the operating principles of devices to measure meat edibility.

Performance criteria

- 5.1 Describe meat eating quality measurement devices in terms of their operating principles.

Range devices include but are not limited to – reflectance meters, pH meters, conductivity meters, colour tiles.

Outcome 6

Describe the method of determining the calculated lean meat yield (CLMY) equation.

Performance criteria

- 6.1 Describe the CLMY percentage in terms of backfat depth and loin thickness.
- 6.2 Describe means of validating the CLMY percentage in accordance with organisational requirements.

Range validation means include but are not limited to – dissection trials, anatomical lean, commercial lean.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 August 1999	31 December 2016
Revision	2	19 July 2001	31 December 2016
Review	3	27 April 2005	31 December 2016
Review	4	19 June 2009	31 December 2018
Review	5	27 January 2015	31 December 2021
Revision	6	17 September 2015	31 December 2021
Review	7	24 October 2019	N/A

Consent and Moderation Requirements (CMR) reference

0033

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

Comments on this unit standard

Please contact the Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.