

<b>Title</b>	<b>Describe ruminant digestion, formulate and cost a daily feed allowance for ruminants to meet a production target</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	This unit standard is for people working in a ruminant production system context. People credited with this unit standards are able to describe the way ruminants metabolise food constituents; formulate and cost a daily feed allowance and describe feeding systems and strategies.
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<b>Classification</b>	Agriculture > Farming Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to the: Animal Welfare Act 1999.
- 2 Definitions  
*Production target* – the quantified output for a farm for a defined period. It may include but is not limited to production units for – weight gain, condition score gain, milk production, meat production, wool production or velvet production.  
*Supplementary feed* for the purposes of this unit standard refers to feed types other than pasture grown on the property, for example fodder crops.

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### Outcomes and performance criteria

#### Outcome 1

Describe the way ruminants metabolise feed constituents.

Range evidence is required for one class of ruminant.

#### Performance criteria

- 1.1 Describe digestion in terms of the metabolism of energy and protein.
- 1.2 Describe digestion in terms of the breakdown of gross energy to metabolisable energy.
- 1.3 Describe livestock requirements for protein, energy, minerals and vitamins.

**Outcome 2**

Formulate and cost a daily feed allowance for ruminants to meet a production target, and describe feeding systems and strategies.

Range evidence is required for at least one production target for one species of ruminant.

**Performance criteria**

2.1 Formulate a daily feed allowance for ruminants to meet a specific production target.

Range must include – pasture and a supplementary feed;  
must include – mega joules metabolisable energy (MJ ME).

2.2 Calculate the cost of the formulated daily feed allowance.

Range must include – cents/MJ ME.

2.3 Describe feeding systems and strategies for feeding a daily feed allowance.

Range frequency of feeding, introduction of feeds, changing feed types.

<b>Planned review date</b>	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	25 June 2002	31 December 2022
Review	2	23 April 2008	31 December 2022
Review	3	16 April 2015	31 December 2022
Review	4	12 December 2019	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0052
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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](mailto:standards@primaryito.ac.nz) if you wish to suggest changes to the content of this unit standard.