



Australian Government

Department of Education, Employment and Workplace Relations

ACMEQU402A Determine nutritional needs in provision of horse health care

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This Unit of Competency covers the process of establishing the impact of nutrition on horses in relation to the provision of health care. This Unit is not intended to provide the skills and knowledge required to formulate rations for individual horses but rather to identify the impact of diet on health and welfare of various classes of horses in relation to the provision of allied health care.

Application of the Unit

The Unit is applicable to the equine industry where it may be necessary to provide dietary advice in conjunction with the provision of health care to horses. In addition to legal and ethical responsibilities, all Units of Competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.

Licensing/Regulatory Information

No licensing, legislative, regulatory or certification requirements apply to this Unit at the time of publication.

Pre-Requisites

There are no pre-requisite Units for this competency standard.

Employability Skills Information

This Unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Relate elements of the equine diet to physiological function	1.1 <i>Nutrient elements</i> are classified according to needs of the body 1.2 <i>Structures of the digestive system</i> are located and the nutrient absorption and metabolism process are described 1.3 Features of a well balanced diet are related to horse health condition and workload 1.4 <i>Impact of an unbalanced or deficient diet</i> on horse health is evaluated
2 Evaluate the composition of common horse diets	2.1 <i>Feedstuffs</i> commonly available and fed to horses in Australia are identified 2.2 <i>Methods of feedstuff preparation</i> are evaluated regarding impact on nutrient availability 2.3 Quality of feedstuffs for nutritional and health value is evaluated
3 Identify factors that may affect horse condition relevant to nutritional requirements	3.1 <i>Horses are classified</i> according to condition score 3.2 Horses are classified according to developmental age requirements 3.3 Horses are classified according to breed, activity and housing status 3.4 <i>Options to adjust diet</i> in relation to horse health status are evaluated 3.5 Owner or carer is referred to nutritional or veterinary specialist for specific dietary requirements and ration formulation advice

Required Skills and Knowledge

This section describes the skills and knowledge required for this Unit.

Required skills include:

Ability to:

- analyse and solve problems using available information and resources including recording information and prioritising daily tasks
- apply interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities
- communicate effectively with others, including questioning, active listening, asking for clarification and consulting with or seeking advice from other relevant persons
- condition score the horse
- consult clearly and precisely with other equine health care providers
- employ safe and environmentally responsible organisational systems and procedures when working with and handling horses
- follow sequenced written instructions; record accurately and legibly information collected; and select and apply procedures to a range of defined tasks
- identify elements of a nutritionally balanced diet and relate them to the function of horse body systems, general health and behaviour
- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection; considering zoonotic and exotic disease possibilities (biosecurity)
- numeracy skills to estimate, calculate and record routine workplace elements
- read and follow required policies and procedures, including OHS, infection control and waste management
- solve problems using available information and resources including recording information and prioritising daily tasks
- use safe manual handling techniques and equipment
- use safe, hygienic and environmentally friendly waste handling and disposal procedures.

Required knowledge includes:

Knowledge of:

- anatomical and physiological structures, features and functions related to dietary needs and the absorption and metabolism of nutrients
- anatomical directional terminology
- consequences of an unbalanced or deficient diet to horse function, health and behaviour
- equine allied health practitioners' codes of conduct
- factors affecting availability of nutrients to horses
- feedstuffs commonly fed to horses and the general principles of a balanced diet for horses
- impact of breed, age, workload and housing on diet

- methods used to assess horse condition and general health
- nutritional needs for different classes of horses
- principles of animal welfare
- relevant legislation, regulations and codes of practice, including OHS, animal welfare and ethics, veterinary practice and waste disposal
- signs and symptoms of an unbalanced or deficient diet in horses
- safe work practices
- workplace hygiene standards (biosecurity) including: disinfectants, cleaning agents and techniques, cleaning and appropriate disinfection or sterilisation of equipment, materials and personal protective equipment (PPE).

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this Unit	The evidence required to demonstrate competence in this Unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this Unit. Assessors should ensure that candidates can: • locate the anatomical structures and define the process involved in nutrient absorption and metabolism in horses • classify the range of feedstuffs available in Australia for their nutrient value to horses • identify factors that affect nutrient availability in horse diets • evaluate the impact of an unbalanced or nutrient deficient diet on horse health and behaviour • identify the variation in nutritional demands for various classes of horse • classify horses by condition, health, age and housing status • provide advice to owners or carers on managing dietary principles in relation to equine health conditions and age status of the horse. The skills and knowledge required to determine nutrition needs in provision of horse health care must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.
Context of and specific resources for assessment	Assessment for this Unit is to be practical in nature and will be most appropriately assessed in an equine allied health workplace or in a situation that reproduces normal work conditions. There must be access to a range of horses and anatomical models and the relevant equipment and resources to enable one to demonstrate competence

Method of assessment	To ensure consistency in performance, competency should be demonstrated, to industry standards, on more than two occasions over a period of time in order to cover a variety of circumstances, cases and responsibilities and over a number of assessment activities. The assessment strategy must include assessment of competency in a work environment. Suggested strategies for this Unit are: • written and oral assessment of candidate's required knowledge • observed, documented and first-hand testimonial evidence of candidate's application of practical tasks • simulation exercises that reproduce normal work conditions • case studies • third-party evidence • workplace documentation. This Unit may be assessed in a holistic way with other Units of Competency relevant to the industry sector, workplace and job role.
Guidance information for assessment	Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socio-economic backgrounds).

Range Statement

The range statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<i>Nutrient elements</i> may include:	• electrolytes • energy • fat • fibre • minerals • protein • vitamins • water.
<i>Structures of the digestive system</i> will include:	• hepatic structures • large intestine • mouth and teeth • salivary ducts and glands • stomach. • small and large intestine
<i>Impact of an unbalanced or deficient diet</i> may include:	• health problems related to feeding: • arthritis • becoming tucked up • colic • developing a dull or rough coat • developing a nervy disposition • diarrhoea • exertional rhabdomyolosis (tying up) • hoof health • laminitis • leg swelling • manure eating (coprophagy) • muscle wasting/atrophy • parasite burdens • pedal osteitis • poor appetite/eating (anorexia versus dysphagia) • predisposition to inflammatory conditions • vitamin and mineral deficiencies

	• wood chewing/crib biting • condition of horses: • losing or gaining weight.
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Feedstuffs may include:	• chaff • electrolytes • extruded pellets • hay • minerals • pastures • processed mixes for specific categories of horse • raw feeds/grains • sweet feeds (processed grain mixes) • vitamins.
Methods of feedstuff preparation may include:	• adhering to appropriate feeding time requirements • boiling or soaking grains or pellets • changing rations to suit local conditions: • high energy feeds for working, exercising, competing or racing animals • spelling feeds for horses coming into work or being let down • climate • correct fibre/protein ratio for use • damping feeds as required • ensuring prepared feed is given to correct horse only • following relevant competition rules related to feed additives • maintaining enterprise's safe feed preparation procedures: • cleaning buckets, feed and water containers • following instructions related to feed mixers and grain crushers • minimising dust • using dust masks • using safe lifting and handling techniques • washing hands • reading and following feed ration lists and directions • recognising spoiled or contaminated feeds • recognising and adding prescribed supplements • using feed weighing scales.
Horse classifications may include:	• age requirements: • nursing foals • orphans

	• weanlings • yearlings to maturity for breed • mature horse/pony • aged horse/pony • breed, activity and housing: • broodmares • leisure • performance/competition • spelling • stallions • starting/breaking in • transport • various breeds of horses • large pasture • small paddock • stables/stalls • condition score system: • very poor • poor • moderate • good • fat • very fat.
<i>Options to adjust diet</i> may include:	• alter frequency of feeding • alter type of foodstuffs fed • alterations to preparation techniques • awareness of toxic plants in pastures • environment for example: position of feed bins • expert nutritional advice • natural versus domesticated feeding regimes compared • transition time to alternative diet • vitamin/mineral/electrolyte supplementation.

Unit Sector(s)

Equine