



Australian Government

ACMGAS303A Plan for and provide nutritional requirements for animals

Revision Number: 1

ACMGAS303A Plan for and provide nutritional requirements for animals

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the process of calculating rations based on animal species needs and availability of feedstuffs. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	The unit is applicable to those working in the animal care industry where it may be necessary to plan nutritional requirements for animals in various animal care sectors, including but not restricted to, companion animals in pet shops, boarding kennels and catteries, dog and cat breeding establishments, research technology animals, native and exotic animals in zoos, wildlife parks and animal rescue and rehabilitation facilities. 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.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify nutritional requirements of animals	1.1. Animals are classified according to natural nutrient sources and types of digestive systems. 1.2. Normal feeding behaviours and nutritional requirements of a range of animals in the animal care workplace are aligned with natural diet and controlled environment animal requirements. 1.3. Feeding strategies and methods to maximise activity and behavioural enrichment are evaluated. 1.4. Characteristics of under or over supply of nutrients are identified and methods used to monitor nutritional uptake are evaluated and practised.
2. Evaluate food sources and calculate dietary requirements	2.1. Foodstuffs are classified according to nutrient content. 2.2. Foodstuffs are evaluated for shelf life, preparation requirements, availability and cost. 2.3. Hazards to animal and human health from food sources are identified and methods used to manage potential risks are implemented. 2.4. Feed weight and water requirements are estimated based on animal profiles. 2.5. Protein, carbohydrate, vitamin and mineral supplement and fibre needs are estimated based on animal profiles. 2.6. Other dietary issues relevant to the animal's profile are identified and factored into dietary calculations. 2.7. Diet plans are prepared and documented after supervisor approval.
3. Prepare diets and provide food and water	3.1. Food is prepared in accordance with diet plan and stored safely and hygienically 3.2. Food and water is presented in accordance to different species requirements and in compliance with organisation policy and procedures.
4. Monitor feeding and watering practices	4.1. Food and water consumption is monitored and recorded in accordance with organisation policy and procedures. 4.2. Abnormal feed intake or feeding behaviour are identified and reported in accordance with organisation policy and procedures. 4.3. Animals are monitored for condition, metabolic and behavioural changes.

ELEMENT	PERFORMANCE CRITERIA
	4.4. <i>Reasons for poor response to diet</i> are evaluated and specialist advice sought as required. 4.5. Required dietary changes are determined in consultation with supervisor and / or others. 4.6. Dietary variations are documented and records updated as required.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- maintain the highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- measure, interpret and record animal weight, length and other relevant objective indicators of change in physiological status
- literacy skills to read and follow organisational policies and procedures, including occupational health and safety (OHS) and animal welfare; follow sequenced written instructions; and record information accurately and legibly
- oral communication skills/language to fulfill the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- numeracy skills to estimate, calculate and record routine workplace measures
- 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
- problem-solving skills to use available resources and prioritise daily tasks
- use personal protective clothing and equipment correctly
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

Required knowledge

- anatomical structures and features affecting feeding and nutrition
- animal classifications that influence dietary needs and styles of eating
- behavioural features related to feeding styles and unsuitable responses to diets
- feedstuffs available and approved in Australia for animals, their availability, cost, shelf life, method of storage, preparation and presentation to animals
- methods used to calculate rations, estimate weight of animals, calculate dry feed weight of food stuffs and other relevant measurements and calculations used for diet planning and food preparation
- nutrition related diseases
- organisational policies and procedures, including OHS and emergency procedures
- protein, carbohydrate, vitamin and mineral supplement and fibre needs for a range of animal groups
- physiological features affecting dietary needs
- potential causes of poor response to diets and tests used to investigate dietary problems
- principles of animal welfare and ethics
- relevant federal and state or territory OHS and animal welfare legislative

REQUIRED SKILLS AND KNOWLEDGE

- requirements and codes of practice
- safe work practices
- sources of nutrients for particular animal classes and groups
- workplace hygiene standards, disinfectants, cleaning agents, cleaning techniques and cleaning equipment and materials.

Evidence Guide

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:

- develop diets for animals in consultation with others
- prepare, store and distribute food according to animal needs, workplace protocols and procedures whilst maintaining quality control and hygiene practices
- monitor response to feeding program and modify diets as required in consultation with supervisor.

The skills and knowledge required to plan for and provide nutritional requirements for animals 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 of this unit is to be practical in nature and will be most appropriately assessed in an animal care industry sector workplace in which candidates are working or in a situation that reproduces normal work conditions. Workplaces can include pet shops, breeding or boarding kennels and catteries, aviaries, companion animal training, grooming establishments, animal shelters, zoos, wildlife parks, mobile animal facilities and animal technology facilities.

There must be access in either situation to a range of animals as well as relevant information, equipment and/or resources to enable one to demonstrate competence. Assessment must be relevant to the industry sector in which candidates are working and must cover a minimum of one species from at least two of the six major animal groups OR at least three breeds from within one of the six major animal groups (mammals,

EVIDENCE GUIDE	
	fish, birds, amphibians, reptiles, invertebrates.
Method of assessment	To ensure consistency in one's performance, competency should be demonstrated, to industry defined standards, on more than one occasion over a period of time in order to cover a variety of circumstances and over a number of assessment activities. The assessment strategy must include practical skills assessment. Suggested strategies for this unit are: • written and/or 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 • third-party evidence • workplace documentation • portfolio. 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 socioeconomic backgrounds).

Range Statement

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>Nutritional requirements</i> may include:	• carbohydrate • protein • fat • roughage • vitamin • mineral and trace elements • water.
<i>Animals</i> may include:	• animals commonly encountered within the industry workplace and may cover both native and introduced species • animals from the six major animal groups (mammals, birds, reptiles, amphibians, fish and invertebrates).
<i>Nutrient sources</i> may include:	• carnivores: • insectivores • piscivores • herbivores: • folivores • frugivores • grainivores • mucivores • nectivores • palynivores • xylophages • omnivores.
<i>Feeding strategies and methods</i> may include:	• locating food sources to ensure adequate supplies throughout the year • modifying diet for younger or special needs animals • providing food at suitable intervals for animal species • presenting food in ways that reflect natural habitat and encourage active foraging or

RANGE STATEMENT	
	- hunting - preparation and distribution of food to: - minimise opportunities for theft by other animals or pests - encourage consumption before food deteriorates or loses nutritional quality - reflect ways that food would be available in the wild where possible - provide the best source of nutrients available within budget and seasonal availability - ensure all animals in enclosure get adequate access - removing stale, contaminated or decomposed food to discourage vermin.
Methods used to monitor nutritional uptake may include:	- blood and faecal tests to check nutritional uptake - comparing food distributed and food not eaten - estimating condition scores - weighing animals.
Hazards to animal and human health from food sources may include:	- animal movement and handling - contamination of foodstuffs from vermin, bacteria, fungus, virus and other sources - contamination from other animal diet materials that are potentially toxic to some species - manual handling and general food preparation, storage and distribution equipment - organic and other dusts - plants and other materials thrown into animal enclosures by the public - possibility of zoonotic infection - shelf life of foodstuffs.
Animal profiles may include:	- species classifications: - age - sex - breeding status - other characteristics - seasonal requirements, including hibernating animals - climatic requirements - activity levels

RANGE STATEMENT	
<i>Species requirements</i> may include:	• food presentation needs: • fresh grazing • fresh meat • live food • food sources: • catering for animals recovering from illness or injury • highly specific food sources for particular animals such as koalas • seasonal availability • food preparation: • dried or semi-dried foodstuffs • stage of decomposition of meat products • stage of development of plants or insects • vitamin, mineral and other supplements • whole items to allow opportunity for animal to prepare • water requirements: • running water • water from other food sources.
<i>Abnormal feed intake or feeding behaviour</i> may include:	• demonstrating signs of stress during eating activities • disinterest in food • drinking excess water • gorging food • not drinking normal amounts of water • reluctance to eat when other animals are nearby • selectively eating.
<i>Reasons for poor response to diet</i> may include:	• health problems: • digestive system disorder • metabolic disorder • parasite load • teeth condition • other underlying illness • food sources: • food presented in an inappropriate way for species • food quality • food quantity

RANGE STATEMENT

	• food spoilage due to weather and climatic conditions or poor storage • inappropriate food sources for species • environmental and behavioural conditions: • dominant animals taking most of food • lack of space for individual animals to feed • distress caused by proximity of other animals nearby.
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Unit Sector(s)

Unit sector	Animal studies
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		