Fact sheet

Cattle nutrition following emergencies – best practice in the immediate/short-term

MEAT & LIVESTOCK AUSTRALIA

This fact sheet provides best practice information for cattle producers when they need to transition pasture-fed cattle to a diet of hay and/or grain in an emergency situation. Producers are advised to also seek professional advice from a vet or animal nutritionist, particularly before feeding grain to livestock for the first time.

How to introduce cattle to new feed

Grain poisoning and death can occur when cattle that are normally pasture fed are introduced to grain too quickly. Best practice is to **feed small amounts every three days** and add protein meals, grain legumes or white cottonseed[1].

Cereal grains and urea can be poisonous if fed in large amounts before cattle are adapted to them being the diet. They should be introduced gradually (over 7-12 days) to reduce the risk of illness and death[2].

If hay/straw are limited, select a fibre-based pellet that is safe to feed as a complete feed, or as a high proportion of the daily ration. Follow the advice of your nutritionist and/or the manufacturers recommendations.

Acclimation may be an issue if cattle are unresponsive to new feed and they are losing condition within the first two weeks of being introduced to new feed and/or a new environment[3].

Check the quality of imported hay and try to avoid feeding material that contains mould. If you are forced to feed mouldy hay, seek advice on feeding a mycotoxin binder/deactivator to help prevent cattle from getting sick. Producers are advised to contact a veterinarian for more information.

Introducing new feed to weaners requires more guidance[4]. **Refer to mla.com.au/new-feed-weaners for a fact sheet which covers this.**

What to feed

A supplement of **hay and/or grain** (preferably oats) is best when introducing cattle to grain.

It is important to make sure that cattle are full on hay for at least 2-3 days prior to the introduction of grain/pellets. This will help to minimise the risk of grain poisoning.

Feeding **minerals and urea** should not exceed recommended intakes as this can result in illness and even death. Blocks and licks must be fed according to directions.

How much to feed

A guide to the daily feed requirements of beef cattle with no pasture available is shown in Table 1.

Table 1: Daily feed requirements of beef cattle where no pasture is available[5]*

Class of stock	Energy required (MJ ME/hd/day)	kg hay required (per hd/day)
Cow (450 kg)* + calf (1-3 months)	90	12***
Dry cow (450 kg) middle-late pregnancy	65	9
Bulls (700 kg)	70	10
Early weaned calf (150 kg) < 6 months, 0.25 kg/day wt. gain	30	4**
Weaner (250 kg) 6-12 months, 0.25 kg/day wt. gain	40	5.5
Yearling (350 kg) 12-18 months, maintenance	40	5.5
Steer (500 kg), maintenance	60	8

*The quantity of hay in the table assumes all requirements are being met from hay and the hay is of reasonable quality (8.5 megajoules per kg. dry matter).

Table 2 provides supplementary feeding recommendations for various classes of stock when there is deteriorating dry feed.

Table 2: Supplementary feeding recommendations for cows and dry stock in situations with deteriorating dry feed[6]

Available feed	Supplement	Frequency
Deteriorating dry feed	Molasses/urea/ protein meal	Continuous access
- Quantity and digestibility restrict intake	OR	Feed daily or 3 times/week
- Feed energy/protein supplement mixes	Grain/protein meal	
- Full hand feeding follows	Grain/protein seeds or meals	Feed daily or 3 times/week

WARNING: Cereal grains and urea can be poisonous if fed in large amounts before cattle are used to them. Be sure to introduce them gradually to reduce this risk. Rations consisting wholly of grain are not recommended for lactating cows; instead, feed a mixture of 80% grain and 20% hay.

[1] *Supplementary feeding of cattle.* New South Wales Department of Primary Industries, January 2007. [2] *Hints for feeding.* Agriculture Victoria, May 2017. [3] *Benefits of Feedlot Acclimation.* MLA publication, March 2019. [4] *Weaner nutrition following bushfires.* MLA fact sheet. January 2020. [5] *Feeding options for beef cattle.* Agriculture Victoria, May 2017. [6] *Supplementary feeding of cattle.* New South Wales Department of Primary Industries, January 2007.

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