

Creep feeding strategies

By Simon Marsh

The aim of this study was to investigate the effects of feeding autumn-born suckler calves with either a 13% or 16% crude protein (CP) creep feed.

The study was carried out in a 130 spring and autumn calving Stabiliser suckler herd. The majority of heifer calves not retained as herd replacements were sold for breeding at 13-14 months old. Bull calves not sold for breeding were intensively finished at 14 months old, producing 340-360kg car-case weights



Creep feeding - the benefits

By the time the suckled calf is four months old, half of its feed requirements should be met by grass, silage or creep feed, rather than milk. At this stage a calf will convert feed to bodyweight more efficiently than at any other time in its life.

Creep feeding suckled calves has a number of benefits including:

- Improved growth rates
- Reduced incidence of respiratory disease and other health problems
- Minimised growth checks at weaning

However, information regarding the effect of different formulations of creep feed are lacking.

Formulation of feeds (% of mix, as fed)

Creep Feed A	Creep Feed B
(13% CP as fed)	(16% CP as fed)
Rolled barley 57.5%	Rolled barley 47.5%
Sugarbeet feed 25%	Sugarbeet feed 25%
* Promol natural 10%	* Promol natural 20%
Molasses 5%	Molasses 5%
Minerals 2.5%	Minerals 2.5%

**Promol natural is a concentrate containing 42% crude protein from feedstuffs including soyabean meal and rape-seed meal.*

A total of 38 September and October born Stabiliser calves were randomly assigned to one of the two creep feeds. The two diets were introduced when the calves were 60 days old and fed until the calves were weaned.

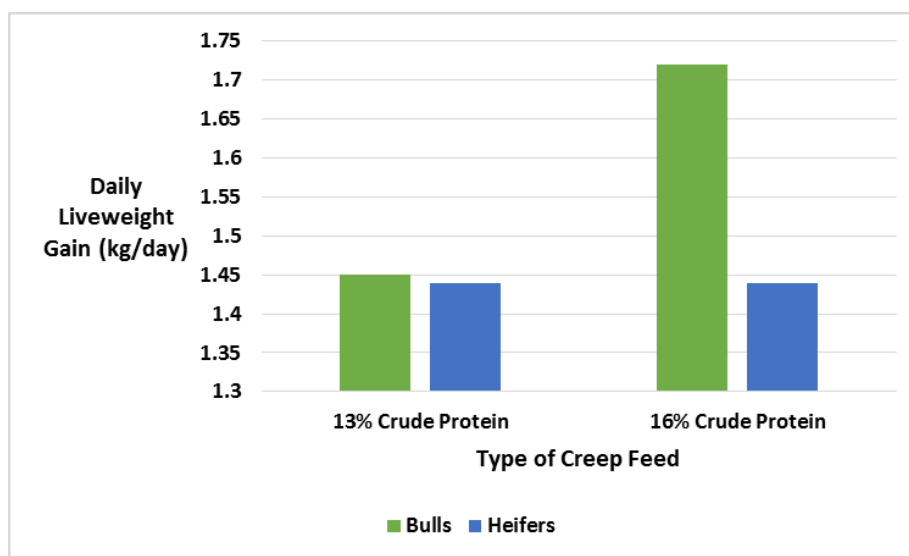
Results

Average performance of both bull and heifer suckler calves fed two creep feeds

	13% Crude Protein	16% Crude Protein
Calf weight at start (kg)	126	126
Calf weight at weaning (kg)	305	324
Daily liveweight gain (kg)	1.5	1.6

The 16% crude protein creep feed resulted in an increased daily liveweight gain of 1.6 kg/day, compared with the 13% crude protein creep feed at 1.5 kg/day.

The effect of the sex of calf on the response to the two different creep feeds



The daily liveweight gain of the bull calves fed the 16% crude protein creep feed increased significantly by 0.27kg/day, when compared to those bulls fed the 13% crude protein creep feed. However, increasing the crude protein content of creep fed to the heifer calves had no effect on liveweight gain.

Financial performance of all calves when fed the two different creep feeds

	13% Crude Protein	16% Crude Protein	Difference (£)
Creep feed cost (£/t)	225	281	56
Creep feed cost/calf (£)	88	123	35
Value of weaned calf @ £2.50/kg	763	808	45
Calf value minus creep (£)	675	685	10

When the additional cost of the 16% creep feed was compared to the additional live weight it produced then there was a positive margin of approximately £10 per head, compared to feeding a 13% creep feed.

Summary

This trial showed that bull and heifer calves would benefit from being kept in different management groups, to enable bull calves to be fed a creep feed containing at least 16% crude protein and the heifer calves fed a lower protein creep feed.