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Nutrition for suckler cows as they approach calving

## What are the objectives for good nutrition approaching calving?

- Produce a viable calf at birth
- Maintain cow health
- Maximise reproductive efficiency
- High calf growth rates - driven by milk
- Use body condition built up at grass to reduce feed costs in winter

The key to achieving these objectives is managing cow condition and feeding management.

## Managing body condition score

Body condition scoring cows should be part of your cow management routine, it is worth taking the time at handling to quickly assess each cow for their fat cover. The body condition scoring scale is from 1 to 5, 1 being thin to 5 being very fat. We want to aim for around condition score 2.5-3 at calving. Cows that are too thin may have problems around calving with metabolic disorders and poor quality colostrum and milk supply. They are also more likely to take longer to recover from calving and take longer to get back into calf. Fat cows near calving have low appetite and mobilise fat. This fat locks up calcium and magnesium which are essential for good muscle tone and as a result these cows can have slow calving with subsequent problems with a weak calf. Also too much fat in the birth canal may cause calving difficulties.

## What is a unit of body condition score worth?

One unit of body condition score is worth around 13% of the cow's liveweight, for example on a 650kg cow one condition score is around 80kg of weight gain or loss.

Pre-calving nutrition starts 4 months before calving not just in the last month. To get cows into the right condition should be a gradual process that is thought about well in advance of calving time. We want to avoid large swings in condition loss or gain. Normally cows will gain weight at grass over the summer months and we want to make use of this condition over the winter to keep expensive feed use as low as possible. If cows need to lose a condition score, then it will take 160 days, at a daily weight loss of 0.5kg/day. Therefore, cow management for calving starts at the beginning of the winter. Autumn calving cows are more difficult to manage at grass unless they have restricted grazing.

## What condition should cows be in for calving and how do we achieve this?

Cows should be around condition score 2.5-3 at calving. This can be achieved by grouping cows early in the winter according to their condition. Ideally we would have 3 groups of cows - fat, normal and thin. This is in an ideal world and not everyone will have the space or facilities to do this, so even taking out the thin cows and first/second calvers will help. Grouping of cows will depend what is manageable on your farm.

The correct condition can be achieved by restricted feeding, knowing what the requirements of each group are and how much you need to feed to meet these requirements. *Ad lib* silage for suckler cows is often too much. It is worth spending time at the start of the winter looking at cows and getting rations worked out by a nutritionist. To do this you will need to know the weight and condition of your cows and the quality of your forage.

**Table 1: Requirements for dry suckler cows in different body condition (kg fresh weight/head/day)**

	FAT 650kg cow -0.5kg/day	NORMAL 650kg cow no loss or gain	THIN 650kg cow gaining 0.5kg/day
Silage*	20	25	32
Straw	3	3	3
Barley	-	-	1
Minerals	0.15	0.15	0.15

\*Note this is an average 10ME silage; analysis of your own forage must be used for rations.

Table 1 shows the difference in requirements to get cows starting at different levels of body condition to reach target condition for calving on the same forage.

In addition to paying attention to the energy intake of the cow, she should have a ration that has a minimum of 90g/kgDM (9% in DM) of crude protein. This minimum protein level is needed to maximise the digestibility of forage. Below this level, digestibility and intake will drop.

### Important considerations of restricted feeding:

- To achieve energy requirements feed access must be available for every cow to eat at the same time. If this is not available some cows will get fatter and some will get thinner
- If there is only high energy forage available and only a small amount needs to be fed, the cows dry matter intake may not be adequate to satisfy her appetite. This is often unavoidable but in extreme cases it will lead to stressed, noisy cows!
- Watch protein levels, for example if you are feeding a straw based diet ensure that all cows get the right amount of the protein source

Cows should be monitored throughout the winter to see how the ration is performing and no sudden changes should be made in the diet in the weeks approaching calving, ie no extreme weight loss.

If expected calving dates are known then cows may be re-grouped according to those due in the first four weeks and those due later and fed accordingly.

With a normal calving period being 12 weeks then there is a big difference between the energy requirements of a cow 1 week from calving and 12 weeks from calving, so feeding all cows to meet requirements at point of calving may result in some cows gaining excess condition.

### Key points

- Essential to analyse forages, high energy silages are great but not as appropriate for sucklers, high energy forages with good protein levels can be fed with straw to fill cows up and meet requirements, watch low protein, high energy silages
- Feed according to body condition and start planning early
- Minerals - offer a standard beef cow mineral until one month before calving, then a pre-calving mineral that has a higher magnesium, vitamin E and selenium

Colostrum production – cows start making colostrum 2 weeks before they calve. Colostrum is much higher in energy and protein than milk so this should be taken into account by feeding an extra supplement such as soya (unproven). The ability to do this will depend very much on the management of the cows and the calving spread.



## What if you do have thin or fat cows close to calving?

### Thin:

- Keep on ration to put on condition
- Give them the best forage available
- Avoid overloading with concentrates

### Fat:

- Can still be losing a bit of weight up to calving
- Meet protein and mineral requirements
- Avoid 'starvation' diets for over fat cows