

Nutrition of the suckler cow pre and post-calving

To have the best chance of being profitable, a suckler cow should calve early in the calving season every year of her breeding life. Nutrition plays a key role in achieving this, influencing health, fertility, calf output and production costs.

Optimising cow nutrition is achieved by:

- Careful management of body condition score (BCS) throughout the year
- Understanding the nutritional requirements of the cow during her production cycle
- Knowing the nutritional composition of the feeds available.

BCS is an important tool for suckler producers to help them optimise health, welfare and fertility, while minimising calving difficulties and production costs. Pregnancy diagnosis can also be invaluable as it provides an indication of calving date. This allows better rationing of cows to achieve target BCS if cows can be grouped according to body condition at weaning/housing.

Pre-calving

The general approach when managing spring calving cows is to aim to calve them at a BCS of 2.5. Both over-fat cows and cows that are too thin risk having calving problems. Cows that are too fat in late pregnancy will have increased risk of calving difficulties due to deposition of fat narrowing the birth canal. Conversely, cows that are too thin can have an increased risk of going off their feet pre-calving and not recovering. They also produce less colostrum and weaker calves.

The energy requirements of a cow increases during pregnancy. However, traditionally, feeding recommendations tend to feed suckler herds on a flat rate basis. This approach generally works, but can result in some body condition loss during the last six weeks of pregnancy unless additional feed is provided.

Feeding dry cows ad libitum silage can result in them becoming over fat during the dry period. Incorporating straw or poor quality forage into the diet can provide a means of filling up the rumen without gaining condition, as long as the diet is balanced for protein, vitamins and minerals.

Table 1: Example dry cow diets based on silage (300gDM/kg, 10.6MJME/kgDM), straw (6.3MJME/kgDM) or hay (8.5MJME/kgDM) based on a 650kg spring-calving suckler cow eight weeks from calving and losing 0.25kg/d.

	Diet 1	Diet 2	Diet 3
Silage (kg)	17 (restricted)	-	-
Straw (kg)	4.5	9.5 (to appetite)	-
Hay (kg)	-	-	9.5 (to appetite)
Barley (kg)	-	1.0	-
Rapeseed meal (kg)	-	1.5	0.5

Minerals are essential in the pre-calving period, with specific requirements depending on the diet being fed. In particular magnesium, selenium, vitamin E and iodine are required to promote cow health and calf health and vigour.

Post-calving

Cows have around 80 days in which to recover from calving and conceive for their next pregnancy if they are to maintain a 365-day calving interval. Body condition at calving tends to be related to body condition at service. This in turn is related to the number of days a freshly calved cow or heifer takes to resume normal cycling after calving and therefore time to become pregnant again.

Table 2: The effect of body condition score at calving on calving interval

BCS at Calving	Calving Interval
1.0-1.5	418
2.0	382
2.5-3.0	364
Source: Drennan and Berry 2006	

The energy requirement of a freshly calved cow is approximately double that of a dry cow, therefore planning calving to coincide with the availability of cheap feed such as grazed grass will help control feed costs. Milk yield peaks at around six to eight weeks after calving, which coincides with the breeding season, so access to good quality grazing needs to be planned for cows and heifers being put to the bull. Every effort should be made to minimise, and if possible avoid, body condition loss between cows calving and getting back in calf.

Table 3: Nutrient guidelines for a mature 650kg suckler cow

	DMI (kg/day)	ME MJ/day	CP % in DM
Early lactation	12-14	120-130	11-12
Late lactation	9-11	85-95	11
Dry	10	75-80	9

Note – the table above provides a general guide only and the exact diet specification required will depend on many factors such as cow condition, weight loss allowed and date of turn out.

More information regarding the nutritional requirements of the suckler cow can be found in the BRP manual, [Feeding Suckler Cows and Calves for Better Returns](#).

AHDB Beef & Lamb has also produced a webinar entitled Feeding the Suckler Cow this Winter, available on the [AHDB Beef & Lamb YouTube channel](#)