



Does inadequate pre-calving feeding have an impact?

Inadequate pre-calving feeding during the dry off period can have a drastic impact on calf health and poor colostrum formation, which in turn, can lead to poor calf immunity and ultimately calf mortality. Poor nutrition through forage and supplementary diet feed, along with the cow's metabolic status and body condition score (BCS) of the dam, can have an impact on calf health.

The uterine environment experienced by the foetus can also influence its future long-term productivity, fertility and health, according to Teagasc. Studies show that the nutritional/metabolic status of one generation can impact the health status of the following generation, and is described as the transgenerational metabolic-disease complex.

BCS and feeding have to be considered when preparing for the new calving season, as management of the dry cows and heifers can have direct and indirect impacts on calf health later in the season. The ability to significantly alter colostrum quantity or quality by dietary means is limited once the metabolisable energy, protein and micronutrient requirements of the dairy cow are met. If these requirements are not met, it can lower colostrum quality significantly.

The dry cow diet is dependent on the BCS of the group and silage quality.

| Silage DMD | BCS 2.5 (12-14 weeks dry) | BCS 2.75 (8-10 weeks dry) | BCS >3.0 (8 weeks dry) |
|------------|---------------------------|---------------------------|------------------------|
| >72 | Silage +1kg meal | Silage ad-lib | Silage Restricted |
| 68-72 | Silage +2kg meal | Silage +1kg meal | Silage ad-lib |
| 64-68 | Silage +3kg meal | Silage +2kg meal | Silage +1kg meal |

Overfeeding cows and particularly heifers causing them to calve at over a BCS of 3.5, can result in foetal overweight, which can make calving a lot more difficult. As well as that, increased calving difficulty will increase the risk of stillbirth. Having dietary micronutrient imbalances, in particular iodine and calcium can result in perinatal mortality through weak calves and uterine inertia. Cows with an optimum BCS pre-calving of around 3.25 will have healthier, faster growing calves, which can be credited to the better colostrum quality and calf immunity they received in early life. On the other hand, calves that are born from nutritionally restricted dry cows have poorer immunity and subsequent health.

It is vitally important that cows get the correct balance of energy and protein to meet the cows increasing nutritional demands as the cow approaches calving. High quality protein is recommended in the close up period to ensure the production of high quality colostrum.

The best preparation for the calving season, is to ensure that the dry cows are being supplemented with protein, energy, fat and micronutrients, as it will result in better calf immunity, less calf ill-health and better growth rates. Farmers need to give their calves the best chance of survival and the best chance of thriving, by ensuring the cow is calving down at a BCS of 3.25.

Pre-Calver Ration

A high energy pre-calver ration that will promote maximum production right throughout the lactation. The feeding of a pre-calver ration before calving will prime the dry cow's rumen for milk production, ensure it is adapted to the feeding of concentrates, reduce the risk of metabolic diseases and promote higher intakes post calving.

- Contains high quality proteins
- Contains Bypro – a superior source of digestible by-pass amino acids that can reduce the cases of retained placenta and metritis while increasing colostrum quality post calving
- Stimulates appetite to increase DMI post calving
- High cereal starch level to promote ruminal papillae development to increase the absorption of volatile fatty acids post calving
- Contains a high level of locally sourced oats. Oats are an excellent feed for incalf cows and ensure vigorous new born calves
- Will supply sufficient Magnesium and Bandon Precalver mineral & Vitamins in 2 kg feeding
- Magnesium plays a key role in preventing Clinical and Sub-clinical milk fever
- Available in both coarse and cubes bulk and in 25 kg, 500 kg and 1 tonne bags