

GUEST ARTICLE

The Transition Period: Are your cows set up to fail?

Stuart Russell of Nantwich Farm Vets tells RADA what to consider and what to do.

What is a calving cow's priority? - producing milk (to feed the calf). What should be your priority? - producing milk efficiently. To keep her efficient, she has to calve again. Your cow has programmed herself to look after her calf and forget about fertility until there is enough energy to support it. Why are we surprised when we can't get her pregnant?

The Trick

Minimise negative energy balance and condition score loss. The less condition a cow loses, the more energy there is for reproduction. She gets bulling and back in calf faster, has much better immunity, and is less likely to get postpartum diseases like metritis, whites and mastitis. The key is to realise that the cow PREDICTS how much energy will be available for lactation & fertility based on the last few days of the dry period.

Although maximising intakes in fresh cows is essential, it is almost impossible to reduce condition loss this way - the cow has already decided that there is not enough energy in the late dry period, so has programmed herself to milk off her back. She just doesn't eat as much as she should. The real trick is to maximise intakes before calving, convincing her that there will be plenty of energy available to support her lactation and future fertility.

The Trap

HOWEVER, there is a very large trap that most people fall into. You MUST keep dry cow condition under control. Not only that, you must keep energy intakes under control. Whether she gets fat or not, a cow that eats too much energy in the far-off period will not eat as much in the near-tos. This cow then tricks herself that there's no food about and will lose too much weight postcalving. Feed her ad-lib grass silage in the far-offs and all you're doing is fattening up the cow and unborn calf nicely so you can help the vet pay for his fancy new Navara. Even if this excessive energy intake only happens in the far-offs, the damage has already been done.

The Truth

'Fatty liver' is otherwise known as 'Type II ketosis' because it is like Type II Diabetes in humans. Worryingly, it is most often subclinical, can even affect skinny cows and is caused by a big drop in intakes before calving. Excessive negative energy balance follows as well

as increased susceptibility to metritis, whites, mastitis, twisted stomachs (LDAs) and milk fever. A warning flag for a herd with fatty liver/Type II ketosis is if too many cows are having problems or are dying in the first 60 days.

Anything you do to reduce intakes in the last week or so of the dry period will cause type II ketosis. Feeding too much to the far-offs, overstocking, fat cows, lame cows, stale silage, mouldy feed troughs, heating silage, dirty drinking troughs, locking head rails etc. It's the simple things, but they'll do a lot of damage.

The Ticket

The ideal dry cow and transition period:

1. Sort cow condition before they're dry. You'll have no chance afterwards. Run a fat (& pregnant) cow group on a higher protein diet and they'll milk off their backs.
2. Limit dry period energy intake to around 105 MJ/day. This can be raised to 115 MJ/day in the last week or so.
3. Maximise dry period dry matter intakes. Lots of good quality straw, well chopped and mixed in a tasty TMR ad lib.
4. Plenty of feed space - At least 0.7m per cow in the group, ideally more.
5. Provide plenty of clean, fresh water. If you don't, food intakes will suffer.
6. Control Milk Fever - keep off the grass! Plenty of straw/long fibre, dry cow rolls with or without extra DCAB minerals.
7. Minimise Stress - Stable social groups, no lameness, no techno music.
8. Provide essential nutrients. Choline, methionine, and cobalt reduce liver fat accumulation, as may glycerol, glycol and certain sugars. Antioxidants reduce liver damage and

may help maintain intakes. Selenium is very important for immunity around calving.

9. Give the cows a 3-week rest after calving - a small group separate from the main herd with the best beds, the tastiest food with extra fibre, at least 0.7m feed space per cow, and a short walk to the parlour.
10. Don't let them get fat in the first place - heat detection, quality nutrition advice and monitoring from the herd manager, nutritionist and vet.

Next time you have trouble with fertility, held cleansings, or LDAs, take a proper look at the dry period. Even a nasty e.coli mastitis is no excuse for an LDA if she got mastitis because her immunity was poor! Are your near-tos eating at least 13-14kg dry matter a day? If not, why not? If the near-tos are being looked after like princesses, my bet is that you're overfeeding your far-offs. Set them up for success. If you get the transition period right, they'll all milk well, hold condition and get back in calf. Now that's an efficient herd.



Stuart Russell of Nantwich Farm Vets. ■

nantwich | **farm vets**
part of nantwich | veterinary group