

In the second of our two-part series from Elanco, Mark Burnell from Synergy Farm Health offers practical advice on tackling ketosis.

# KETOSIS

## the theory

Two of the keys to preventing ketosis are maintaining feed intakes in the run-up to calving and into early lactation, and managing body condition at a fairly consistent score of 3.0.

But these simple things are often easier said than done, says Mark Burnell from Synergy Farm Health, a practice which runs veterinary services throughout the south-west of England.

"Looking at dry cow condition score is a good place to start and you do not want to see many over 3.25 or under 2.5," he says.

"Fat cows are at the highest risk because they are prone to reduced feed intakes around the time of calving, but thin cows are also susceptible if their nutritional management is poor," he says.

If many are off target in either direction, he says, there are plenty of places to look.

"For instance, are dry cow feed intakes being compromised by over-stocking, poor feed palatability, insufficient trough space or an inadequate water supply," he says.

"Or perhaps we need to look back to the previous lactation where there may have been a

problem with fertility leading to over-conditioned cows.

"Look at all of your cows critically at the time of drying off and then keep a close eye on them throughout the dry period.

"Cows which look spot-on and have no previous history of ketosis and are carrying just a single calf should get through calving and early lactation well if their management and feeding stay on track," he says.

### Cows at risk

"But wherever a doubt exists, we now have monensin delivered in a bolus which can be used three to four weeks before calving and has a good record of seeing cows out of trouble.

"The active ingredient in the bolus works by shifting the microbial balance in the rumen so ultimately more glucose is produced which becomes available as energy to the cow," he explains. "This protects her against the tendency to drop into negative energy balance during the transition period and therefore protects against the major cause of ketosis."

Managing body condition is only part of the story, and Mr Burnell says stress can make any problem worse.

"While a degree of mixing is



Vet Mark Burnell says fat cows are at the highest risk of ketosis.

unavoidable at this stage, it can be cut to a minimum with good planning and design," he says. "For instance, if you have your calving pens right next to the group which is closest to calving you can quietly slip a cow through just as she starts to calve – this way there is no social change and the stress of the movement is negligible."

Once the cow has calved there is much which needs watching closely and Mr Burnell says it is important to monitor any rapid loss of condition, cows not cleansing properly, potential cystic ovaries, low milk proteins or cows just not coming into milk well.

Getting it all right means it is possible to cut out clinical ketosis altogether and reduce the sub-clinical rate to under 10%, substantially less than the national average of around 30%.

"I would recommend monitoring this figure in any herd," he says. "This can be done with the Keto-Test™, which measures the ketone body, beta-hydroxybutyrate (BHB), in the cows' milk.

"The test is carried out between two and 21 days after calving and, if transition management is working, it will hopefully confirm that you're managing transition cows well," he says.

### Barometer

Other production diseases including milk fever and displaced abomasums also act as a barometer of the success of transition management, which Mr Burnell reiterates should be a high priority in any herd.

"Manage your transition cows just as well as your milking cows – scrape them out twice a day and bed them up regularly," he says. "Remember they're an important part of the herd so do not manage them as an after-thought.

"Avoiding ketosis is a critical part of any herd's management, and since it is a gateway disease – often at the root of a range of other metabolic disorders – keeping it under control will always pay dividends."