

Reducing antibiotic use and 'just in time' calving

Transition-cow update

Selective dry-cow therapy was a topic discussed at this year's British Mastitis Conference and delegates at the Transition Cow Conference, organised by Premier Nutrition, heard about the latest dry-cow management research.

text **Rachael Porter**

Udder health remained good, and in some cases improved, during a study that looked at reducing antibiotic use in dairy herd through selective dry-cow therapy.

That was the finding of a trial, carried out in Belgium across four herds, by Karlien Supré from the Flanders Milk Control Centre. She said that she hoped the work would give producers more confidence to take the selective-use approach

"We saw bulk milk somatic cell counts either remain stable or fall," she told delegates at the British Mastitis Conference, which was held in Worcester in November. "And, during the trial, the percentage of clinical mastitis cases was either unchanged or actually fell," she added.

The majority of antibiotics used in dairy herds are for the treatment of udder health problems. "Tackling udder health issues by increasing preventative measures and drying off health cows without using antibiotics would support the responsible use of antibiotics," said Dr Supré, explaining the rationale behind her work.

She added that Belgium has to work on reducing the antibiotic use in its dairy herds. "It was falling, but we saw a slight increase – 1.1% – in 2013/2014. I think that's because treatments are not always well considered and some producers are still very much taking a blanket approach – particularly when it comes to using dry-cow therapy."

Four herds, comprising around 250 cows in total, took part in the study and the producers registered all clinical mastitis cases and drug usage.

Udder health was assessed at the start of the project and then again on a monthly basis throughout the 18-month study. "There was also monthly contact and

discussion with the vet, either in person or by phone, to discuss the udder health of the herd and to also ensure that preventative measures were being taken effectively and that the producer was happy with progress," explained Dr Supré.

"Working closely with the producers to improve management at ground level was very important. Communication, education and guidance can reduce udder health problems – and therefore antibiotic use – on most units."

Transition management

Among the speakers at November's Transition Cow Conference was the University of Wisconsin's Nigel Cook. He explained that when a cow is dried off and joins the dry cow group, she has to firstly identify where she is in the hierarchy. "As a result she won't be eating or sleeping as much, because the cows already in the pen have the seniority,"

he said, adding that one study had shown as much as a 9% decrease in dry matter intake when a cow was moved into the group.

"This 9% could be the tipping point between negative and positive energy balance. This effect is influenced by stocking density – so could be mitigated by ensuring plenty of space in the dry cow pen. Alternatively, in large herds, cows could be dried off in batches to form a group that stayed together until calving. Many large herds in the US employed a 'just in time' calving strategy. This involves moving cows from the dry-cow group into an individual calving pen when they were just at the point of calving. This provided the cow with a 'quiet, private place to calve'.

However the move needs to be made only once the water bag or calf's feet are showing. If cows are moved too early, this can have a negative impact. Professor Cook added that adopting a 'just in time' calving approach required hourly checking of close-up cows and ensuring that staff were well trained on when to move cows.

This research was the inspiration behind the development of Premier Nutrition's transition-cow monitoring service – TMS. This is available to producers throughout the UK. TMS allows producers to practically monitor the success or failure of their transition-cow management. |

'Just in time' approach: cows should be moved once the water bag or calf's feet are showing

