

Tank test tracks milk quality

Wake up to additional milk test results – a vital part of the daily routine

It's a year since the additional milk test results service was introduced and many of the 400 users are well and truly hooked and admit that they wouldn't be without it. We spoke to four producers about how it has helped them.

Just as most farmers check the daily weather forecast, so Peter Cope and his herdsman Charles Staines check their milk test results every day for the 500-Holstein cows under their care. A service provided by National Milk Laboratories and using milk samples taken at each bulk tank collection by the milk buyer – in this case Dairy Farmers of Britain – Peter signed up a year ago when the additional results service became available.

"I check the results by email every morning and Charles gets a text too," says Peter, who manages his herd at Brookside Farm, Poulton, near Chester. "Nine times out of 10 there's 'no comment'. But if milk quality, yields and particularly cell counts are not on target then warning bells sound."

Three years ago Peter and the family combined two dairy herds and set up a new unit on a green-field site. "Our attention was diverted from 100% cow management. This, I'm sure, contributed to the subsequent rise in cell counts and calving interval."

Other factors inevitably played their part in declining performance as the cows moved on to the new site, including the introduction of new cows, the switch from a herringbone to rotary parlour and to a housed system with a TMR. "We also started to move to all-year-round calving rather than a main block in autumn. The cows – and us – were under a degree of stress and we needed to bring things back under control."

Finger on pulse

Additional test results are now a vital part of keeping a finger on the pulse and cell counts were the main reason for using the service initially. "We're looking at a downward trend and we're averaging less than 250,000 cells/ml now so if a

Samples taken from each bulk tank collection for the additional test results service



Peter Cope (l) and Charles Staines: "Additional test results sound early warning bells"

result pops up higher than this we take a closer look," adds Peter. "It's really an early warning service because we then have to turn to individual

Additional tests on offer

All producers who have their milk tested through NML for payment purposes on the seven-day contract, which accounts for more than 85% of producers, can use the additional milk test results service either through NML or through their milk buyer.

cell counts and quickly find out where the problem lies. During the past 12 months we've done ad-hoc cow tests then treated offenders.

"We have our targets for daily test results – for fat and protein – and I keep an eye on urea levels. In the case of cell counts we're working towards 200,000 cells/ml. This additional results service doesn't give us the answers, but it sounds warning bells and really keeps us on our toes."

Karen Wright

'On-off' option offers ideal flexibility

The need for accurate up-to-date information was what prompted Gordon Brown to use the additional test results service, although he admits that once the cell counts are back under 200,000cells/ml he will return to relying just on weekly results and his NMR records.

"It's been good value for money – we're trying to get on top of a Staph. aureus infection and we've taken drastic action, keeping milk from 20 cows with cell counts of half a million out of the bulk tank and treating these cows with a heavy antibiotic," says Gordon.

Tough targets

The other cows from his 230-cow Holstein herd are averaging a very respectable cell count of 190,000cells/ml and this, or lower, is the target for the whole herd – well under the

250,000cells/ml level set by his milk buyer Dairy Farmers of Britain.

Although Gordon had hoped he could just treat the offenders with an antibiotic and clear up the infection quickly his vet, Kevin Beattie from Capontree Vet Practice, persuaded him otherwise.

"Kevin thought that it was vital that we ring-fenced the offending 20 cows to prevent cross infection then, once they'd been treated and it had run its course, we let them back into the herd.

We're just at this point now and I'm hoping averages have come right down. We'll see if their individual cell counts are under control at the next NMR recording. We have been advised to run the group separately, milking them last until we are sure they're no longer a contagious risk during milking to the rest of the herd.

"The flexibility of the additional testing service suits me well – I like being able



Gordon Brown: "Flexibility of the additional testing service suits me well"

to 'buy' a month at a time when I think performance is getting out of line."

Buyer criteria brings cells under the spotlight

Cell count payment levels from milk buyer, Milk Link, was what really focussed Somerset-based producer Will Pow's attention on bringing cell counts back under control in his Holstein herd.

"Cow numbers had been increasing and we had reached full capacity," says Will, who admits that management had to step up a gear to make sure top quality milk was produced from their expanding herd.

"Averages had crept above 300,000 cells/ml and we needed to get back into the 200s as quickly as possible before it really started to cost us a lot of money and, if the trend continued, it could ultimately have affected the saleability of our milk."

The 250 Holstein cows at Inglesbatch run alongside the family farm's arable business. The rotation works well with cows making full use of grassland in summer and straw from the arable unit used in loose housing during winter. Slurry from the cows goes on to the maize and arable land.

Although outbreaks of mastitis had remained constant for many years, the alarm bells on the herd's cell count rang loud and clear early in 2007. "Milk Link suggested we started using the additional testing service and getting our milk test results following every collection – in our case every other day."

Early investigations with the vet found that the cause of rising cell counts were environmental pathogens. "Culling wasn't really an option – we had to get rid of the bugs in the system," adds Will. For a six-week period milk from cows with exceptionally high cell counts were kept out of the tank.

"We had about eight cows in this group and they were treated and only allowed back in the herd once they had a clear test. At the same time we improved housing hygiene and watched out more diligently for underlying cases of high cell counts off the NMR records."

Twelve months on and the situation is much improved with targets being met. "It would seem a backward step to go back to weekly bulk test results – that



Will Pow: "Test results from each tank is part of modern herd management"

were at least 10 days old by the time we got them. Getting results on milk quality and cell counts from every tank of milk is far more in keeping with modern cow management. We're certainly more in control now."

Butterfat control this spring helps to keep payments on target

Regular checks on butterfats, particularly at turnout time, will be important this spring for Yorkshire producer Richard Shepherd. And for the second year running he will take full advantage of his additional test results that are phoned through to him within 24 hours of the milk leaving the farm.

Richard, his two sons and their herdsman manage a tight ship at Marton Park, Stillington, combining an arable unit with 170 Holstein Friesian cows averaging 9,500kg on twice-a-day milking and a traditional management system.

"I'm on a liquid contract with Dairy Farmers of Britain and get paid for milk quality so that's why I want to make sure it's on target," says Richard. "Butterfat will typically fall at turnout, but if I know exactly what's happening on a daily basis I can adjust the ration – within a few days we're back on track. There's a direct link between doing this and the milk cheque so there's no doubt in my mind that the additional milk test

results service is good value for money." Richard's original reason for using the service, which was promoted through his milk buyer, was to help control rising cell counts. "They had gradually gone up from around 150,000cells/ml to 350,000cells/ml. Waiting for my weekly bulk milk test results through the post was too long."

By getting the information every other day Richard and his herdsman started to monitor trends and if cell counts rose they immediately worked out what had changed. "It might be a few newly calved cows had joined the herd," he says. "So we would keep their milk out and see if they were the culprits."

"Or if we knew we had some high cell count cows we'd be suspicious that they were continuing to contribute more than their fair share to the herd average and treat them."

At the same time, Richard worked with his vet on improving udder and parlour hygiene. "We adopted a belt-and-braces approach and it worked – and in fact it's now part of our routine management.

There's no doubt that the additional test results were a catalyst and it's now common sense to me that we know the quality of every tank of milk leaving the farm."

Richard Shepherd: "More frequent test results are a catalyst"

