What can a milk sample tell you about feeding your cows? Well, put the milk test results under the spotlight and anomalies will show up that may explain cow performance and may act as early warning signs of what may be in store if action at the feed face isn't taken.

Barrie Audis: "Companion's Feed Monitor has the ability to pre-empt problems"

What goes in determines what comes out – and there's no better example of this than cow feeding. If the energy or protein balance isn't right – if there's not enough fat – then cow performance will suffer.

But what might have, in the past, been a minefield to pinpoint, is now part of routine herd management. This is thanks to the computer and its abilities to provide the 'ammunition' for the nutritionist, vet and adviser.

"We don't have to chew over the figures anymore," says NMR's Ben Bartlett. "Herd Companion does that for us in minutes and regularly – every time there's some new data from milk tests."

In a nutshell, the Herd Companion program is accessed through NMR's web site. Producers can use it to see their weekly bulk milk test results through NML and their monthly NMR test results

Barrie Audis who specialises in nutrition "And this is probably a bit of an understatement. Quite a few of my dairy clients are on board too and I have some where we hold meetings over the phone – both looking at the latest individual results on the screen and picking out problems. It really helps these guys to stay ahead of the game.

"There's a report in Feed Monitor that I see as a lifeline in many herds. It shows the relationship between protein percentage and milk production. For each herd, Feed Monitor will put in the line that corresponds to the 3.2% protein level and this is the level of milk production that can be sustained by this herd's diet while maintaining 3.2% milk protein – the level considered an acceptable target.

"Then I look carefully at the protein-to-fat ratios for each cow following each

with a fertility problem. Cows were bulling but not holding in calf. My first reaction was to increase the energy in the diet. The cows responded by increasing yields by 800kg, but there was little improvement in fertility.

"Looking again at the Feed Monitor milk production graph, we could see that production for the past four months had dipped below the 3.2% protein intercept line set for this herd.

"In simple terms this told us that the diet was not supporting the herd's milk production at the required protein level, and cows were milking off their backs. This would present a problem particularly for those cows in early lactation. They would, or were already,

Action at the feed face before problems arise

Nutritional nuggets can be gleaned from the milk sample and keep performance on track

Milk quality tells a tale

but its usefulness goes much further and to make it easier to use, the system is divided up into sections. One of these is the Feed Monitor section, a firm favourite with nutritionists.

"I rely on Feed Monitor," says adviser

Herd Companion

In the next issue of CowManagement we will look at herd health and cell count monitoring – made easy through Herd Companion. For more information about Herd Companion contact NMR on 0870 162 2547 or your vet or adviser.

recording – I'm actually just looking to pick out those cows in early lactation where the fat to protein ratio is high. These animals are at risk – or may already be suffering – from ketosis."

Two case studies
So what happens in practice? Here are two examples given by Mr Audis where the Herd Companion Feed Monitor has provided the answers to problems that, left undetected, could have escalated and resulted in significant drains on herd performance.

Case study 1: energy issue
"Here we had a 9,500kg Holstein herd

losing condition and this situation was contributing to the fertility issue. "By isolating the individual cows – which is easy to do with Feed Monitor, the next step was to work with the vet and carry out blood testing and metabolic profiles. These tests diagnosed under utilisation of the dietary energy, despite there being enough energy provided. We rectified this by tackling the thiomolybdate overload."

Case study 2: fat to protein
"This herd of Holstein cows was yielding around 7,800kg and fed on a TMR and through out-of-parlour (OPF) feeders. Again, fertility in this herd was not up to

scratch and the average calving interval was running at 435 days. Contributing to this was a higher than average occurrence of ketosis in some cows in the zero to 100 day interval.

"We needed to pre-empt the ketosis problem by looking at the fat-to-protein ratio for each cow. If the fat-to-protein ratio is more than 1.3 then the cow is likely to be at risk of ketosis. This is information provided by Feed Monitor. Within five minutes of opening up the system we spotted the cows at risk.

"Within this herd, the cows that had high ratios were allocated an extra 1kg of feed in the OPF for the next month and monitored again after the next recording.

As a result the incidence of ketosis dropped more or less immediately and the ratios of fat and protein were back on target. During the past year the calving interval has been reduced by 24 days.

"We continue to check the fat-to-protein ratios monthly and adjust rations accordingly. And while there might be an argument for increasing concentrates as a precaution across the board, a more cost-effective route is by using Feed Monitor so just the cows that need it get it."

Distance learning
Advisers and vets that use Herd Companion's Feed Monitor will readily

admit to being able to spot problems in the herd without ever seeing the cows – just by looking at monthly production compared with the protein intercept line and at the fat-to-protein ratios.

"It's a very water-tight process," adds Mr Bartlett. "Because of this, it is a vital part of herd management on many units where producers work closely with their vets and advisers. Because of the growing interest in this area we are running a series of training workshops in the Herd Companion Feed Monitor early in 2009."

Karen Wright