Fertility testing bumps up dairy production

Dairy farmer Kristin Clark from southern NSW has been using an accredited Australian Cattle Veterinarian (ACV) member to check her dairy herds' fertility with PREgCHECK™ for more than six years now – and says she can see the productivity benefits clearly reflected in her days-in-milk figures.

Snapshot

Producer	Kristin Clark
Location	Finley, NSW
Property area	900ha
Enterprises	750 dairy cows
Soil types	Sandy loam
Annual rainfall	450mm
Irrigation	Murray Irrigation
Veterinarian	David Petersen
Enterprise	Finley Veterinary Clinic
Location	Finley, NSW

Kristin runs a 750 cow dairy operation with her mother Helen and sister Donna between Finley and Tocumwal in the Southern Riverina district of NSW. The dairy has been running for some 40 years, with Kristin having returned to it six years ago.

The Clarks run a year-round calving herd, and carry out pregnancy testing on a monthly basis.

"We've been using the local vet, David Petersen, to pregnancy test our cows for years, so we originally heard about PREgCHECK™ through him," says Kristin.

"At one time we did consider doing our pregnancy testing through milk sampling, but chose not to primarily because of the false positive results. The method was around 96% accurate. Because we are running 750 cows, the 4% inaccuracy would really add up – it was just too much of an error for us.

"Using our vet to do the testing is very accurate, close to 100%, with only one or two per year that do not subsequently calve."

As a result, Kristin says that the family has become much more proactive about managing fertility in the herd.

"Accurate pregnancy testing forms the basis of lots of our decisions," she says.

"When we have the vet here running PREgCHECK™, we get him to do a health check on any cows that haven't cycled in the first 80 days. As a result, we pick up any fertility problems early. If cows are not in calf, we can sell them or become more proactive in trying to get them pregnant."

Another major factor for the Clark family was the extra benefits of having their vet on the property regularly.

"If we have any health concerns or cows off colour, it's easy for him to check them while he is here," says Kristin.

"But the major benefit is the high degree of accuracy in the results. We have been able to reduce our days in milk from 240 days down to less than 200 days, which is a great measure of productivity improvement."

The Clark's vet, David Petersen, was an early adopter of PREgCHECK™ technology, having used ultrasound techniques since the 1990s. He is an ACV member, accredited to run PREgCHECK™ testing.

"Cow pregnancy is such a driver of the dairy business – if it's not done right, the dairy farmer is losing milk production and also running the risk of not enough calves for the self-replacing herd," he says.

"In the past, farmers often relied on presuming that cows that didn't return to heat were pregnant. But the reality with high production dairy cows is that many of them won't return to heat – however it doesn't necessarily mean they are pregnant.

"You can end up with far too many cows not in calf, and very long average days in milk, which is inefficient. You are losing too many litres of milk, and therefore income.

"It can be hard for producers to visualise lost income, so some just don't realise the money they are losing by, for example, having their cows produce a few less litres of milk every day when their days in milk is high."

David says dairy farmers may not realise the additional benefits that ACV accredited vets can add to their business.

"Being on the spot with a dairy herd means we can firstly identify if reproduction is within industry benchmarks, or way outside," he says.

"If a dairy herd's fertility is outside the industry norms, we can start answering the big question, which is 'why'?

"The number one factor causing poor fertility is usually nutrition. We will also look at reproductive methodology – including any potential issues with how artificial insemination is performed. Depending on the data, we may need to look at the bulls and see if the problem is there – especially if we are seeing more bulls being used to mop up from AI. If indicated we can then perform **BULLCHECK™** examinations."

"If all the boxes are ticked, then we go looking for diseases such as cystic ovarian disease or pestivirus, which can have a big impact on fertility. We are regularly picking up problematic health issues with cows just by being there – and it means we can take early action."

Accurate early pregnancy diagnosis also allows accurate drying off. The cost of drying cows off too early is enormous if they are still producing well. A cow doing 20 litres per day dried off a month too early means 600 litres of lost milk - an approximate value of $300.

David believes the biggest benefit of **PREgCHECK™** is the cost relative to the benefits. "The test is incredibly cost effective. The cost-to-benefit ratio is excellent."

PREgCHECK™ and BULLCHECK™

PREgCHECK™ – Professional Reproductive Examination is the flagship accredited cattle reproduction scheme run by accredited members of Australian Cattle Veterinarians (ACV). It is a nationally recognised pregnancy diagnosis and tail tagging system for the identification and certification of cattle pregnancy status, particularly for sale purposes. Australian Cattle Veterinarians have registered the **PREgCHECK™** scheme and the tail tags with the Australian Competition and Consumer Commission (ACCC).

The three most common tags are red indicating over four months pregnant, blue indicating under four months and green indicating not detectably pregnant. Each tag bears a serial number and a veterinarian identification code.

BULLCHECK™ - Professional Reproductive Examination is a standardised bull breeding soundness evaluation using prescribed assessments and summarises the result into five fertility components. If a bull meets all the minimum standards at all levels of the **BULLCHECK™,** it has a high probability of being fertile.

Doing the sums

Kristin Clark's dairy herd has gone from 240 days in milk to 200 days in milk since using **PREgCHECK™**. ACV member David Petersen explains what this means in terms of productivity.

"Every herd has average 'days in milk', which is an important number in understanding dairy productivity," he says. "You need a balance in this number – in a year round calving herd 160 days-in-milk is probably too low, but 240 days-in-milk is definitely too high.

"Peak lactation is at about 60 days when cows give their highest milk production. After that, production starts to slowly taper off.

"Cows at 240 days-in-milk might only average about 22 litres a day. If you can bring them back to 200 days-in-milk, they might be averaging 25-26 litres – up to four extra litres per day per cow.

"In a herd the size of Kristin's, we are talking about an increase in production of four litres per day in 750 cows, which is 3000 litres. That adds up very quickly."

Increasing the average litres of milk per cow dilutes the cost of production and provides for greater profit.

Australian Cattle Vets is a special interest group of the Australian Veterinary Association Limited ABN 63 008 522 852

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