

Test for the best liquid gold

Words by: **Katherine DeWitt**

I've been obsessed with a little tool called a Brix refractometer for a few years now.

Squirt some colostrum on the tool, look through the eyepiece, read the scale and you can determine the quality of colostrum in seconds. It's a useful option to add to your calving toolbox to help make informed decisions so your calves get the best quality colostrum.

When talking to farmers who use Brix refractometers the same learnings come up again and again.

Colostrum quality varies and unfortunately you can't tell how good the colostrum is unless you test it.

Otago farm manager James Matheson is one farmer who started using a Brix refractometer four years ago – a move that's vastly improved the health of his calves.

As part of the WelFarm programme run by XL vets, calves at Chris Lawlor's Waipahi farm, managed by James, were given antibody blood tests. These tests establish whether calves have received enough protective antibodies to help them develop immunity.

"Back then, we were rearing 250 calves and thought we were doing a good job but it turned out half the calves weren't getting enough of the right colostrum, so we had to make changes," says James.

"Our vet introduced us to the Brix refractometer and since we've been using it to test colostrum we haven't looked back."

Once his team started using the Brix they followed up with antibody blood tests and had pretty much perfect results, whereas before it had been "a bit hit and miss."

"We would strip the cow into a test bucket and everyone would be saying 'look at this – it's good stuff'. But when we tested it, it was terrible so we were failing to identify the best colostrum and the calves were missing out.

"There's an old tale out there about heifers having terrible colostrum but, in

light bulb MOMENT

JAMES & REUBEN'S TOP TIPS

- Test with a Brix refractometer to ensure calves get enough good-quality colostrum.
- Make sure you have good hygiene practices in place.
- Have a good calf-rearing system – it's more important than having loads of experience in your team.
- No matter what the system it's vital to keep it simple and ensure everyone follows it consistently.

reality, we've found that quite often they have better quality colostrum than the cows, albeit less volume. If we didn't have the Brix to measure it we'd be none the wiser."

James says the best colostrum goes to newborns, the next best colostrum goes to first and second feeders, and it peters off from there until the calves are four days old.

"It's made us realise how important it is to test colostrum quality. This is reflected in the health of the calves too because since we started using a Brix refractometer we haven't lost a calf through illness."

CALF REARING BY TRAFFIC LIGHT

These days James and his team rear 500 calves. It's a big operation and needs a finely tuned system.

In charge of calf rearing is Reuben Earl, who joined the team fresh from Telford Agricultural College two seasons ago.

James says at the time they didn't have a dedicated calf rearer, which most farmers would consider essential.

"This was Reuben's first job, so it was vital that we had good systems in place from the start. Reuben and I collected all the information we could lay our hands on, including from DairyNZ's website, and developed a plan that followed best practice. We call it our 'traffic light' system."

Under the system, new calves are sprayed with a blue dot, tubed with gold colostrum, given a probiotic and a mineral jab. They get a red dot while they're learning to drink, an orange dot when they've got the hang of it, and a green dot when they feed on schedule.

James says the system works a treat. "Reuben gets great results. I think it comes down to his attention to detail. He's really particular and follows the system to a 'T', and everyone that helps has worked out that if they follow the system exactly, it works perfectly."

LEVEL UP YOUR CALF CARE

To help farmers take their calf care to the next level, DairyNZ developed the Calf Care Toolkit last season. So far, it's been used by more than 2000 farmers.

It's easy to use: simply answer 12 easy questions online and get instant tailored feedback and farmer advice on ways to make your calf care even better.

Once you've decided which areas to focus on, follow the web links for more advice and support. You can also share the results with your team, vet or consultant.

Give it a go at dairynz.co.nz/calf-care-toolkit.

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Part 2 - Colostrum

www.youtube.com/watch?v=2MKhXsVx05A

