



Dairy Australia

Your Levy at Work

Effective feeding quick checks

A stable rumen environment is important to reducing the risk of acidosis and allowing cows to produce milk well. We can't see what's going on inside the rumen, but we can use visual clues to assess how well an animal is coping with the diet. Regular observations are valuable if you pay attention to the details, record the information and are ready to act when changes occur.

Quick Check 1:

How much grain/concentrate is left in the bails?



Quick Check 2:

What is the feed's Effective Fibre Value?

To maintain a healthy rumen, the ideal diet contains around 40% NDF. It is also important that the fibre has sufficient length to stimulate chewing and saliva production, and rumen contractions.

Take a look at the A to Z of fibre sources table to see how your feeds rate for Effective Fibre Value.

There's a bit of feed left behind in the bails after milking. Should I worry?

If half the bails have more than 10% of grain / concentrate left behind after milking, check the accuracy of the feeding system by weighing feed allocation in 10–20 individual feeders. If the feeders are working correctly, consider reducing feed.

If more than one bail in 10 has more than 50% left, some cows may have substantially reduced appetites. Check cud chewing and manure consistency to determine if this is caused by acidosis and seek help from an adviser.

Feed left behind in the dairy indicates a problem

How effective is this fibre?

These two feeds have similar NDF contents, yet their Effective Fibre Values are very different. The long fibre length helps to keep the rumen environment stable.

Low risk diets—75% of fibre sources are more than 1.5 cm long .



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Quick Check 3:

What's happening in the vat?

Changes in milk composition are directly linked to the cow's diet. Both fibre content and energy intake contribute to the percentage of milk fat and milk protein. A low fat test may be a sign of acidosis, especially if it falls below the protein test. A falling protein test is a sign that energy intake has dropped. Less commonly, acidosis can also cause the milk protein percentage to drop.

Monitoring changes over a one week period and looking for changes from year to year can help you spot signs of acidosis.

I didn't realise I could use my factory results slip to help check for acidosis! What do I look for?

- Is the fat test less than 3.6% for Holsteins or 5% for Jerseys?
- Has the fat test dropped between 0.3 and 0.5 % in a week?
- Has the protein test dropped more than 0.3% in a week?
- Are your current fat and protein tests similar to this time last year?

It looks like we're okay at the moment but I'd better keep a close eye on the factory results slips.

It seems a bit of a stretch between fat test and acidosis!

When an animal has acidosis, the rumen has a low pH and is acidic. In this state, the microbes produce less acetic and butyric acids which are used to manufacture milk fat in the udder.

Healthy bugs make a healthy rumen and a productive cow.

Milk Supply Company Daily Results
Dairytown
Farm No: 9225

Date: 26/05/2007
Supplier name: BULL A&I

Date:	Litres	B/Fat%	kg	Pro%	kg	BMCC
21/05/200X	7680	4.22	324	3.52	270	126
23/05/200X	7320	4.44	325	3.51	257	130
25/05/200X	7460	4.18	312	3.45	257	143







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Quick Check 4:

What's happening in the paddock?

Take this sheet with you to the paddock when the cows have eaten and are likely to be sitting down.

This will probably be two hours after milking. Observe the following characteristics of the herd, make a note of your results and decide how you are going to act.

	What to observe	What to do
Pasture residuals		
	<p>Check the pasture in the paddock after grazing.</p> <p>Have cows grazed the pasture too short?</p>	<p>Assess your pasture grazing management.</p> <p>Increase supplementary feeding if cows are hungry.</p>
Rumen fill		
	<p>The lower flank should be well distended after feeding.</p> <p>Take action if more than a few are not well distended.</p>	<p>Check that enough feed is being offered</p> <p>Increase effective fibre content of diet.</p>
Cud chewing		
	<p>Carefully watch for chewing actions in cows that are sitting down.</p> <p>More than half of sitting cows should be chewing their cud.</p>	<p>Increase effective fibre content.</p> <p>Check that all cows have equal access to the feed. If recently calved cows are most affected, review the transition diet.</p> <p>Contact your adviser if cud chewing does not improve immediately after you make changes.</p>
Laminitis/lameness		
	<p>Identify and record any lame cows.</p> <p>Is this an isolated case or the sign of a bigger problem?</p>	<p>Call your veterinarian to assist with diagnosis. If it is laminitis, correct fibre level in the diet.</p> <p>Manage lameness as part of your regular health treatment program.</p>

	What to observe	What to do
Scouring cows		
	This cow is scouring. Is this an isolated case?	Take immediate action if more than a few cows are scouring.
Manure consistency		
Score at least 25 fresh manure pats in the paddock using the 1 to 5 scoring system described below. If more than five of the 25 pats are scored 2 or less, take action.		
Manure score 1		Very liquid manure with the consistency of pea soup. May 'arc' from the cow's rump. The bubbles indicate an unstable rumen, fast gut flow, and hind-gut fermentation.
Manure score 2		Runny manure which does not form a distinct pile. Manure will splatter on impact and may form loose piles less than 25 mm high.
Manure score 3		Manure has a porridge-like consistency. Forms a soft pile 40–50 mm high, which may have several concentric rings and a small depression in the middle. Makes a plopping sound when it hits concrete floors and will stick to the toe of your shoe. This is what you are aiming for.

Lactic acidosis is usually easy to spot because the cows are sick. Sub-acute ruminal acidosis (SARA) is more difficult to diagnose. These quick checks help you spot trouble before it becomes a major problem. Look for a combination of signs and seek advice if concerned.