

Weston Animal Nutrition

Winter 2007

Game on!

It is shaping up to be an interesting year in 2007/08. While the hang-over from the drought will be here for a bit longer yet, there is certainly some light at the end of the tunnel now. Most areas have had a bit of a break to get some grass off and running (although frosts and floods have been cruel in some places). Grain plantings are certainly very good and promise to be a great harvest. And what about those milk prices? People might argue that they still aren't high enough but it is certainly a move in the right direction.

There is potential to make up a lot of lost ground this season, providing we can get a few other things to fall into place. The top 5 factors helping to make this season a success are (in no apparent order):

1. Maximising the amount of homegrown feed grown and either grazed or harvested. Anything that you can do to grow more feed this year is a winner. We need to worry about quantity first and then manage for quality, so go for several cuts in Spring if the weather allows. Then, don't skimp on fertilizer. It is a cost that drives income, providing you don't have issues with old worn-out pasture varieties. If you are going to cut costs you need to work on those costs that don't directly impact on income. If you are doing a budget and looking for a benchmark try this on for size: >5% fertilizer (as % of farm operating costs), or >1.5 cents per litre. Make sure that you are getting advice on which fertilisers to put on, and how often, to maximise growth.

If you actually sit down and calculate how much money you spend on grass production each year, you will understand why the emphasis is on growing more tonnes of dry matter. Add up the cost of seed, water, fertiliser, labour, fuel and oil (most of the tractor work is to do with grass/hay/silage management isn't it), and repairs and maintenance to pasture growing machinery, and see what the number is. Then if you were really fair dinkum you would add in the interest that you are paying on the land that the grass is growing on.

The last thing you want is to spend all of this money and not grow enough grass and have to purchase feed on top of that.

2. Manage dry cow condition so that there can be a body condition donation once they calve. Investing in body condition is money well spent, as you will not only improve milk yield, but it will also have a positive impact on fertility. If you are spring calving and your dry cows are ½ score lighter than they should be, seriously consider feeding them some pellets. An extra ½ body condition score (about 20 kg

liveweight for a friesian) is good for close enough to 500 L of milk (close to 40 kg milk solids per cow over the lactation). If we feed them 4 kg for 1 month (enough to achieve that ½ body condition score) that is about 120 kg per cow which will cost \$48 (120 kg x 40 cents per kg). Then, if milk prices are at least 38 cents per litre the return will be \$190 per cow. So, you will have turned \$48 into \$190 per cow for a margin of \$142 per cow. The other thing about feeding pellets to dry cows is that it is possible to make the hay last longer. Ask your local Weston's rep. about some simple ways to feed pellets to dry cows.

3. Lead feed with Calverite Plus. An effective lead feeding program will double, if not triple, your investment within 10 months. That is, the money that you spend on the lead feeding program will return 2-3 times as much in milk production, and health and fertility benefits.

Cows/heifers in the last three weeks before calving are the most important animals on the farm. They are the ones that are about to make the money and therefore whatever happens in this last three weeks will determine her entire lactation. If she stumbles at calving, gets a few metabolic disorders, and doesn't adjust to her milker ration well, we have wasted a lot of potential and been hit with problems that could have been avoided. On top of that, she might struggle to get back incalf. Once again, your local Weston's rep. is well equipped to answer any questions that you might have about lead feeding and help you work through the economics on your farm.

4. Feed an appropriate pellet to match cow requirements and complement the pasture. Regardless of how the season pans out remember that grass is king and we are using pellets to get the most out of the grass and also to boost milk production a bit to help dilute cow maintenance. There are two key concepts here: 1. Grass is only good value if we manage to harvest (graze and conserve) a lot of it. 2. Cow maintenance is a massive fixed cost that can be crippling if the herd isn't producing enough.

Our challenge is to get enough homegrown and purchased feeds into her to dilute that cost out. (See below regarding what pellet will be appropriate for your farm over the next few months).

5. Make a budget. Turn the goals in your head into a plan or a road-map for the year. There are plenty of people around who can help with this. The idea here is to understand where all of the money is going each month. The major costs we want to keep track of are those associated with growing grass and buying in feed. If we can get these two in balance, most of the other costs should be OK (unless of course there is a lot of debt to pay off).

If a budget is checked regularly and kept up-to-date it will be a very powerful management tool this year. The worry is that if we don't have a budget it is possible that some farmers will get to the end of the year,

having been paid significantly more for their milk for the year, and not have any idea where it all went (and possibly not have any money to pay the tax bill).

Troubleshooting for Animal Health

Milk fever

Early lactation - Review the lead feeding program from the last issue of the newsletter or ask your local sales rep for a troubleshooting sheet.

- How long were the cows on lead feed before calving? Ideal is 3 weeks. If it was shorter than 2 weeks it may not have had time to work. It is essential to keep good records of when cows go into the springer paddock.
- Does every cow eat the lead feed? If not, ensure that there is actually enough for everyone, minimise wastage, and if necessary split off those that won't eat it (maybe it's because of competition) and feed them separate with some sugar on top for a few days. Also consider re-filling the hay rings after the grain has been fed.
- Do the urine pH's of cows that have been in for at least a week start to trend down towards 6.5? If not, it may be necessary to feed some extra Calverite or to change around some of the forages that are being offered. How much grass is in the ration? Too much could be counter-acting the effect of the anionic salts. Make sure there is ad lib salt in the dry cow paddock so the cows don't carry high potassium loads into the springer paddock with them. If you are feeding a TMR send a sample in for testing and ask them to calculate a DCAD for you. This will help you balance the ration to overcome the milk fevers.
- Double-check the balance of the ration, ensuring that there is adequate energy and that calcium levels aren't too high or too low. The other thing is to make sure that once we have got enough energy, protein and minerals into the springers, we need to fill them up on fibre. Keeping the rumen packed tight aids rumen function and also helps to prevent against ketosis and displaced abomasums.

Late lactation milk fevers – the herd may have had a substantial lift in production and towards the end of lactation may not have much calcium left in reserves. In this case, anything that puts a cow off her feed will make her susceptible to milk fever. Make sure cows are supplemented with calcium and phosphorous adequately in the last two months of lactation. In the meantime, you could ask a Weston's nutritionist to add some extra lime to your ration for a month.

Tetany – Ask your Weston's nutritionist for extra magnesium in the ration. Also, put a tub of salt out and manage the herd for high levels of nitrogen in the pasture.

Bloat – Consider adding Rumensin. Also put the tub of salt out. Salt will help disperse the bubbles that build up in the rumen and cause the bloat. Make sure that the cows aren't hungry when they go onto a paddock of lush feed. I.e. feed some hay/silage first or a rougher paddock and treat the lush feed as a supplement rather than the forage base if possible.

Rumensin

Pasture intake is related to its digestibility and passage rate through the rumen and these are both limited by forage quality. Forage quality, therefore, limits total nutrient intake and consequently animal performance.

As plants mature, fiber content increases and protein content decreases which lead to decreased digestibility and intake.

Trials have shown Rumensin to increase the cow's dietary energy level by 10 – 15 % in low quality rations.

Rumensin – What is it? How does it work?

Rumensin is a natural fermentation product of a bacteria discovered in 1975. Rumensin causes a shift in the population of rumen organisms resulting in production of more propionic acid which drives glucose production. This results in more energy from the diet and greater feed efficiency and/or improved performance.

Less desirable gram-positive bugs which produce methane, lactate and acetate, lose their osmotic balance when Rumensin is fed which greatly reduces the amount of energy available to grow and reproduce for these bugs. In effect, cows fed Rumensin digest their food more efficiently, meaning more energy is made available from their total feed intake.

Practical Benefits.

During transition and early lactation, this extra energy can be used to reduce sub-clinical ketosis and improve milk production. During mid and late lactation, this extra energy helps to maintain production levels, as well as increase body condition in preparation for the next lactation. Besides increasing feed efficiency, Rumensin helps to reduce methane production and the build-up of foam in the rumen associated with bloat.

Rumensin's Australian Registered Claims:-

ELANCO

Rumensin

- **Increases milk production**
- **Controls pasture bloat**
- **Reduces sub-clinical ketosis**
- **Prevents coccidiosis**
- **Improved reproductive performance, weight gain and feed efficiency in heifers.**

Changing with the seasons – roll on Spring

General Comments

A lack of fibre seems to be the critical issue at the moment. Without the normal back-up of hay/silage/straw, milkers are having to 'make do' with grass and pellets. Increasing the rotation length so that the pasture is older will help a bit but this probably won't be enough to meet their requirements (and most people probably don't have enough grass to just let it get a bit longer before grazing).

While there should be enough fibre in the grass, it may not necessarily be physically effective. When we say 'physically effective' we are referring to fibre that helps to keep the rumen working properly ie. keeps the food mixing, the cow chewing her cud and saliva production continuing. Without a happy rumen the cow can run into all sorts of problems that could cost a fortune.

Even though it might be up to \$500/t for oaten hay/straw in some areas, it could still be money well spent if fibre is the most limiting nutrient. You can easily work out a quick feed budget for straw requirements for your milkers and springers for the next couple of months. If you need help give your local Westons rep a call.

If your cows are a bit sluggish, their manure is black and loose, and they aren't producing as they should be, it would probably be good to get a ring of straw at the dairy for a bit of chew factor. They really only need about 1 kg per cow per day and the demand isn't going to last right into summer. We will reach a point in Spring when the cows will stop eating the straw at the dairy because there is all-of-a-sudden enough physically effective fibre in the pasture. In the perfect world we would roll the straw out in the paddock to ensure that every cow has enough access to it. Long term it might be worth considering some sort of a waste-not feedpad or troughing system to ensure that each cow is adequately catered for.

Talk to your local rep. or one of Weston's nutritionists if you think this is a problem on your farm.

Protein content

If you have plenty of grass available, then there shouldn't be much of a need for any more than a 12% protein pellet. If you have high producing cows and they aren't losing much weight after calving, then you could increase that to 14% protein.

Also, try and get the cows to pasture as soon as possible after having their feed of grain. This helps to ensure that the energy and protein are available at the same time, in order to enable the rumen bugs to grow and multiply. Remember that the bugs themselves are a major source of protein to the cow.

Energy content

Higher energy, higher starch content pellets are the go for grass rations. We still need to have a mix of grains in there to spread the fermentation out to match the grass.

Fibre content

When there is fresh grass around, we don't want a really high level of NDF (fibre) because it will push grass out of the ration (substitution). However, we do want to make sure that what is there can be readily broken down and used for fat production. You will be looking for something that is below 20% NDF if you have as much grass as the cows can eat.

Feeding levels

As mentioned above, we are mostly concerned with grass intake and then using pellets to complement pasture and push higher production. A good way to keep track of how much grain you are using is to calculate the amount of grain fed per litre of milk produced. The year-round average should be somewhere between 0.25-0.3 kg/L. When there is a lot of grass around it should be closer to 0.2 kg/L, whereas if the diet is predominantly hay, it could be as high as 0.35 -0.4 kg/L. Always make sure that you are getting the right amount of response.

Summary

For high quality pasture, the best results come from feeding a high energy, low protein, low-fibre, pellet, with an appropriate brew of vitamins, minerals and additives. Ask your sales rep about which product is going to do the job for you.

Date Claimer

Dairy Research Foundation Symposium 2007
7-8 November 2007 @ Camden Civic Centre

Your local Weston Animal Nutrition representative

Tamworth – Bob Nicholls (Area Sales Rep)
Tamworth – Kimberly Tink (Nutritionist)
Hunter Valley – Chris Wills (Area Sales Rep)
Sydney – Greg Aspinall (National Sales Manager)
Sydney – Todd Middlebrook (Technical Manager)
South Coast – Phil Monaghan (Area Sales Rep)
Bega – Des Ryan (Area Sales Manager)
Victoria – Steve Morris (Area Sales Rep)
Victoria – Tim Huggins (Nutritionist)
Tasmania – Robbie Edwards (Tasmanian Sales Rep)

If you have an issue that you believe is topical for everyone and would like to see it covered in the next issue of this newsletter, please call Tim Huggins on 0437 997 925 or 03 5221 7357.