Dry cow management in summer

Dry cows are often “left to get on with it”, particularly during the summer, but this can have major consequences on the performance of these cows for the rest of the year.

- To prevent fatty liver problems at calving cows should be dried off in fit, not fat condition (around 2.5 for Holsteins), so management in the last 100 days of lactation is critical.
- Early dry cows should then be fed on tight grazing plus plenty of low energy, fibrous feeds e.g. coarse, mature big bale silage and/or straw so their rumens are kept full and they don’t lay down fat around the liver. Ideally they should also have a base level of mineral intake as well, for which Advance can provide either a mineral bucket or dry cow minerals depending on the feeding system.
- Late dry cows should then be brought onto a transition diet. This should include some of the forages from the early dry period, whilst also introducing the forages and concentrates they will be fed when they calve in. This ensures that the rumen bugs ‘hit the ground running’. At this stage they also need plenty of lying area, feed and water trough space.
- Advanced DCAB meal mixed into the transition group diet provides high levels of minerals and vitamins plus Biosaf yeast, Biotin and a range of anionic salts. These combine to produce cows calving in with minimal milk fevers and retained cleansings plus an optimally functioning rumen and an enhanced immune system to help the cows get off to the best possible healthy start to their lactation. The Biotin and concentrated energy sources also combine to help offset any problems from fatty liver, which can result in excessive weight loss, ketosis and poor fertility. Advanced DCAB meal comes ready prepared in 25kg bags or 1 tonne tote bags.
- Advanced HealthyCalver nuts have been developed for situations where the cows have to be fed outside in summer or where there are small groups that don’t warrant a special TMR mix. This provides high levels of energy, protein, minerals and vitamins plus anionic salts to produce a semi DCAB diet in a nut. The 14 mm nuts come in 25kg bags for ease of feeding and are designed to provide a quick, clean calving, with minimal milk fevers or retained cleansings, followed by a healthy start to the next lactation.
- Contact Advance to discuss mineral buckets, Advanced DCAB and Advanced HealthyCalver nuts on 01823 491238

About us...

Advance Sourcing is a sister company to Kite Consulting, but you don’t have to be a Kite client to benefit from our services. We secure the best deals on a broad range of specialist agricultural inputs for our farmer clients, using the technical expertise of Kite consultants to set the optimum specifications before tendering for our supplies.

We work with a large number of trusted suppliers and our aim is simple – to keep you ahead of the competition by sourcing technically sound products that will make or save you money. Our mission is to add value to your business, so why not give us a try?

For enquiries regarding the information in this newsletter please contact:
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Advance update
July 2009

Availa®4 - a revolution in mineral technology

Do you want significantly more milk, lower cell counts, better feet and fertility in your herd? If so, a new mineral which is now available in the UK through Advance will help to achieve a total benefit estimated at over £80/cow/year.

The minerals are manufactured by Zinpro, the leading manufacturer of performance minerals, who place huge importance on independent research that has been peer reviewed and published in recognised scientific journals (such as the Journal of Dairy Science) which have the most rigorous protocols for accepting research. Seventeen such trials carried out around the world have clearly demonstrated significant benefits in all the key areas of dairy herd performance.

What is Availa®4?

Availa®4 is engineered using Zinpro's unique patented mineral-amino acid bonding technology, which bonds part of the zinc, copper and manganese to single amino acids. This allows over 90% rumen protection so the mineral is much more effectively transported through the rumen and into the bloodstream of the cow. By using it as an alternative to standard minerals, producers can expect enhanced performance as long as the overall level of supplementation is maintained.

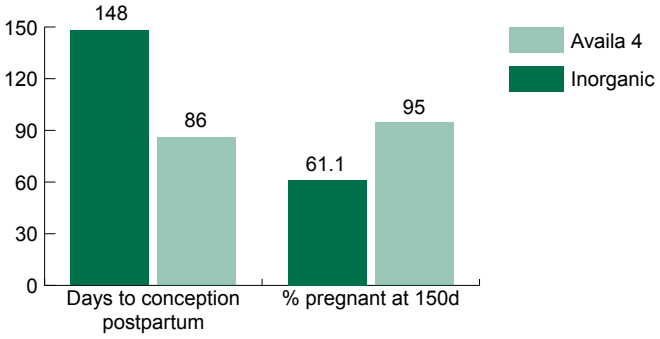
So what can producers expect when they feed Availa®4?

The main four areas where producers can expect to see improvements when including Availa®4 in a ration are:

- Milk yield
- Fertility
- Udder health
- Feet

The seventeen published trials across many thousands of cows have consistently shown an **average 1.1 litre/day yield increase** and an **average SCC reduction of 50,000/ml** when using Availa®4. Studies have also shown improved fertility with cows coming on heat quicker and getting into calf earlier which translates into a higher proportion of the herd pregnant at 150 days. On average research has shown cows **getting pregnant 13 days earlier,** although in some trials the benefits have been much greater.

Figure 1. Effect of trace mineral source on days to conception and percent pregnant at 150 days postpartum (Mandebvu et al., 2000; Uchida et al., 2001)



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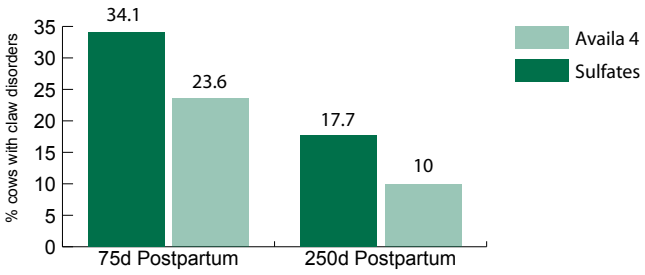
Dairy cow feet have a great deal to put up with, and no one feed ingredient can eliminate the problems seen with white line disease, sole ulcers or digital dermatitis. However, some can be more useful than others. With Availa®4 the combination of specific levels of Availa®Zn, Availa®Cu and Availa®Mn help strengthen the structure of the foot.

A two year study carried out in America to evaluate the impact of feeding a combination of Zinpro minerals on hoof health, showed that feeding the Zinpro mineral combination resulted in a decreased incidence of double soling, white line separation, sole haemorrhages and, ultimately, sole ulceration and digital dermatitis. It also tended to decrease the incidence of dorsal wall ridges.

Similarly, researchers in Florida found that replacing standard zinc, copper, manganese and cobalt with similar amounts of these trace minerals from Availa®4 also resulted in a decrease in claw lesions. Feeding Availa®4 tended to decrease incidence of white line disease and foot rot resulting in overall fewer claw lesions. If cows did exhibit a claw lesion such as white line disease or heel erosion, Availa®4 decreased the severity of the lesion.

Figure 2. Effect of trace mineral source on incidence of hoof (claw) disorders (Ballantine et al., 2002)



Advance client Richard Wynn (pictured) who farms 200

Holstein cows near Whitchurch in Shropshire has been using Availa®4 since 2007. He used a basic mineral before and admits to being sceptical about the potential benefits. "After seeing an 1.5 litre per day yield increase coupled with better overall herd health, harder feet and fewer ulcers I now have total confidence in Availa®4," he said.

The four key areas of improvement when Availa®4 is added to a dairy diet are well documented, allowing Zinpro to launch a programme called PROOF™ (Product Risk: Opportunity or Failure). PROOF™ allows producers and advisors alike to feed in data on the current herd performance and see what the chances of getting a response are – and perhaps more importantly, how much this is likely to be worth to the bottom line.

Zinpro Performance Minerals are the only organic trace minerals capable of being subjected to this form of analysis and at the same time give meaningful results. The data shows a typical response likelihood of 97% getting more than £80.00 per cow per year from more milk, better fertility and improved udder health.

Summary

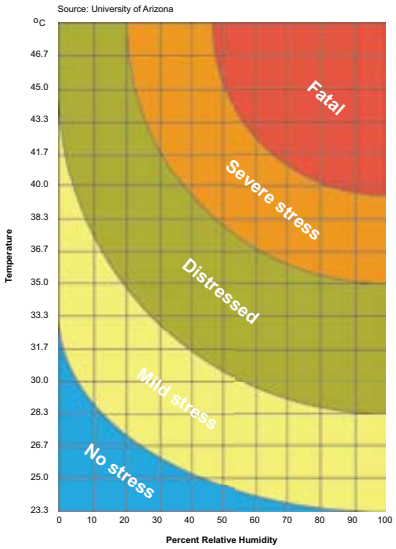
The advantages of feeding Availa®4 are increased milk yield, improved udder health, improved fertility and improved foot health leading to potential benefits of more than £80/cow/year.
For more information or to order Availa®4 please contact Mark Perry on 01823 491238.

Preventing the effects of heat stress in cows

We are approaching the danger time for heat stress in cows. The ideal temperature for a cow is 5°C. At 21°C they become uncomfortable and above 23 - 25°C they start to lose milk and butterfat, have an increasing risk of acidosis, embryo loss, becoming anoestrus and an increased incidence of mastitis and lameness.

When does heat stress occur?

The following chart shows the degrees of stress at varying temperatures and humidities:



Signs of heat stress

- Fall in dry matter intake
- Standing longer
- Lethargy
- Seeking out shade
- Panting, open mouth breathing and drooling
- Increased water intake

Results of heat stress

- Drop in milk yield and butterfats
- Reduced oestrus activity and increased embryonic death
- Immune system breakdown which can result in more mastitis, higher cell counts, IBR and BVD breakdowns – even when vaccinated.
- Lower rumen pH, resulting in acidosis – either clinical or sub clinical
- Laminitis, sole ulcers, white line disease and general lameness

Prevention of heat stress and the effects of heat stress

- Provide plenty of water – a 30 litre cow normally requires 85 litres (18 gallons) of clean water per day. During times of heat stress this can increase by up to 50% due to respiratory losses and sweating.
- Ensure there is plenty of trough space, especially at the parlour exit where cows drink most. Add extra troughs if necessary and clean out troughs regularly to keep the water fresh.
- Provide plenty of room and shade – high yielders and pre calvers are most prone to heat stress, so keep cows in during the hottest part of the day, keep cows well spaced out, especially in the collecting yard, open up as much of the sides of the buildings as possible and open up roof ridges
- Install fans in the collecting yard, parlour and housing areas – installing fans in these areas makes a big difference and ideally a water misting system should be added to make the fan system even more effective. Contact Advance to arrange for a free on-farm assessment.
- Alter the diet – maximise dry matter intakes, increase the forage in the buffer to keep the forage:concentrate ratio right.
- Ideally feed twice/day removing any heating leftovers or add a TMR stabiliser.
- Consider adding protected fat, e.g. BF160 to the diet to add energy without risking increased acidosis.
- Also consider adding 100g Acid Buf to the diet to guard against acidosis and adding 100g Biosaf yeast to improve fibre digestion and improve rumen health.

Summary

Depending upon relative humidity, cows can start to suffer from heat stress when temperatures reach 21 – 23°C. These are not excessive temperatures during a British summer so you should be thinking about preventative measures. For competitive prices on fans, misting systems, Protected fats, Biosaf yeast and Acidbuf contact us on 01823 491238.