



PBA FEEDS

Quality Stockfeeds



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Welcome to our Autumn Newsletter

It's May already and what is the typical start of the main supplementation season. Now is an excellent time to be considering your supplementing options. Even if your grass isn't affected by frost yet, those grazing lush green pastures like ryegrass and oats, can see great benefit from using our PBA Feed New Hi Mag to prevent metabolic issues. If you want us to help you with your supplementation requirements for this season, please contact one of our staff. We are happy to come and see you and assess your situation.

Customer Satisfaction Survey

We are currently conducting an online Customer Satisfaction survey. Customers will receive a link to fill out the survey on email. It is completely voluntary to fill out the survey but for the customers who do, you will receive **2 free bags** off your next order from us. We welcome both positive and negative constructive feedback. If you wish us not to know you filled out the survey, just don't fill out the contact information. We look forward to receiving your responses and improving based on your comments. Thank you in advance for your help.



Catch up with the PBA Feeds team at Beef 2015. You can find PBA Feeds at site 40 (alongside the cattle ring) at Beef 2015 from the 4th - 8th May in Rockhampton. Pick up your voucher for discount link at our site during the show. There will be daily prizes to be won so put your name in the draw at our stand.



PBA Feeds/Hyfeed will then be at Farmfest, Kingsthorpe from 2nd - 4th June. We will once again be joined by Scott Keogh of SK Horsemanship who will be performing daily Horsemanship shows. There will be Farmfest specials on offer and prizes to be won.

For updates on specials and daily prizes, please check out the PBA Feeds Facebook page.



PBA Feeds | 60 Industrial Ave, Toowoomba QLD 4350
Phone 07 4633 2266 | Email sales@pbafeeds.com.au
www.pbafeeds.com.au | www.hyfeed.com.au



Protein Supplementation By Shannon Godwin BaAppSc GDTL

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Supplementation is used by graziers to bridge the nutritional gap between pasture nutrient supply and requirements of the animal. The principle of the primary limiting nutrient is critical in supplementation. The performance of the animal is restricted by the availability of the most limiting nutrient. The excess of supply of nutrients other than the primary limiting nutrient will have no effect on performance. Supplementation must therefore be aimed at supplying the most limiting nutrient as well as any other closely following limiting nutrient. For example cattle on low phosphorus soils will respond to phosphorus supplementation in the wet season more so than in a dry season. This is because when it is dry protein and energy, not phosphorus are the primary limiting nutrients.

As the pasture plant matures the neutral detergent fibre (NDF value = the total cell wall of the forage which is made up of cellulose & lignin plus the hemi cellulose) value increases and the protein and phosphorous content decrease. NDF values are important because they reflect the amount of forage the animal can consume. As the NDF values increase, animals will generally consume less feed as the bulkiness of the diet reduces intake. The decrease in pasture quality as pastures age has a marked effect on cattle productivity by:

1. The low digestibility depresses intake and increases rumen retention time.
2. The low metabolisable energy (ME) content reduces cattle performance.
3. The low protein content reduces the efficiency of microbial fermentation.

The animal requires protein for almost all bodily functions. Protein is a significant and important component of muscle and milk, therefore growing, pregnant and lactating animals require more protein. Importantly, the rumen microbes are able to synthesize protein using nitrogen in the animal's diet and ruminants have the ability to synthesize protein from non-protein nitrogen (NPN) sources.

The nitrogen in the animal's diet can be from two sources. The proteins in plants contain nitrogen and the other source is from non protein nitrogen with the most common being urea and ammonium sulphate. NPN is broken down in the rumen to ammonia and carbon dioxide. The rumen microorganisms then use ammonia to build their own bodies, i.e. synthesize microbial crude protein (MCP). When the microbes are washed from the rumen the MCP is digested in the abomasum. The resultant amino acids are absorbed in the small intestine. Ammonia increases the activity of rumen microbes and the rate at which they break down feed will increase the intake of feed due to faster digestion.

Undegraded dietary protein (UDP) or bypass protein is protein that isn't degraded in the rumen and passes directly into the small intestine where it can be used directly by the animal. Often the high protein requirements of young, fast growing animals and cows in late pregnancy or early lactation, cannot be met by MCP alone. In these situations the animal has a requirement for bypass protein.

Supplementing stock with a loose lick containing urea will increase microbial activity in the rumen allowing stock to chase roughage. The lick allows better digestion of roughage, therefore increasing dry matter intake. The efficient use of loose lick supplementation will increase the intake of poor quality low protein diets by 25-30%. For optimum dry feed utilization in cattle breeders they will need approximately 40-80grams per head per day of urea and growing cattle 40-60g/head/day. Sheep require approximately 4-8 grams per head per day of urea. Only when intakes are below 500g/head/day in cattle can you consider going from a 8% urea lick to a 16% urea lick. Only change to urea levels greater than 16% when intakes are lower than approximately 300g/head/day on a 16% urea lick. Never feed licks to sheep with urea levels greater than 8%.

For loose lick supplements to be effective there must be an adequate supply of dry feed available and ideally supplements should be introduced before conditions become dry and cattle start to lose weight. Livestock should never be started on loose licks that have too high of a urea level, with 8% being an appropriate start for cattle and 4% for sheep.

For further information on supplementary feeding or our products, please visit www.pbafeeds.com.au or call us on (07) 4633 2266.