



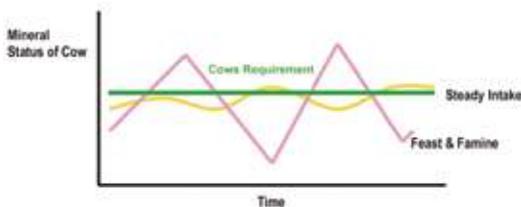
The power of performance minerals

by Jackie Tucker

What are the goals for your herd for this year and next year? If reducing lameness, producing more milk solids per cow, avoiding somatic cell count (SCC) penalties and building your cows' trace mineral status to prepare for next season are your goals, you might consider a performance mineral programme for your herd.

The critical events associated with a dairy cow's lactation cycle are calving and transition, peak mastitis incidence, peak milk production, rebreeding/conception and early lameness. One of the best ways to ensure performance during these periods is to provide a consistent and regular daily intake of essential bioavailable trace minerals. This by far outweighs the "feast and famine" approach of loading up on minerals for short periods and following with a period of no supplementation (Figure 1).

Figure 1



Trace minerals such as zinc, copper, cobalt and manganese are essential nutrients for dairy cows. They are required for maintenance and to support milk production, reproduction, hoof health and optimum immune system function.

Research conducted by Ballatine et al, 2001, showed that continued supplementation for 250

days of lactation (with Availa®4; a complexed trace mineral), significantly increased the production of milk solids compared to the control (sulphates). The study also showed that hoof disorders (in particular white line disease) were reduced. We know that hooves grow slowly (6 mm/month) and therefore the hoof that the cow is walking on today was built up 10 – 12 months ago. To reduce lameness problems (for next season) we need to start building that hoof today!

In a summary of 20 trials, feeding a combination of complexed trace minerals (zinc, manganese, copper and cobalt) reduced somatic cell counts by 14,9% when supplementation began in the dry period ($P \leq 0,05$). Feeding complexed trace minerals throughout the dry period also has many positive responses as proven by research conducted in Israel. The study showed that cows were in a better condition at calving than control cows, colostrum was higher in immunoglobulins (IgG) and immune status was improved.

Year-round supplementation with complexed amino acid trace minerals as part of the programme means that the dairy cows are supported not only during the critical events, but through the remainder of the season and dry period. The programme maximises profit through capturing milk yield improvement for the entire lactation, plus you get the additional benefits of stronger hooves, improved reproduction and general herd health for the next season.

For more information contact Chemuniqué at nutri@chemuniqué.co.za or 011 789 2414 or visit our website: www.chemuniqué.co.za