

Performance zinc – feedlot benefits

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Trace mineral nutrition is a factor to consider when striving for optimum performance in feedlot cattle. To optimise performance, growing cattle require an adequate balance of dietary nutrients; protein, energy, trace minerals and vitamins. As the expectation of higher performance increases, meeting the trace mineral requirements of the cattle becomes more critical. Adequate intake of effective trace minerals can better meet the requirements for high performance.

Zinc is critical for protein and carbohydrate enzyme functions, which affect production parameters and health of the feedlot animal. Zinc functions as a cofactor for more than 200 enzymes. Marginal zinc deficiencies have been shown to affect production, and a loss in performance is seen long before a deficiency can be detected in tissue levels. If a zinc deficiency occurs during the stocker phase, calves will be more susceptible to disease pathogens when they enter the feedlot, because of the role of zinc in immune response.

Forage supply of zinc is often low, which is then another factor leading to zinc deficient calves being shipped to the feedlot. Research has shown that calves had a rapid decline in feed conversion when supplemental zinc was removed from their diet and the only source of zinc remaining was basal levels supplied by the forage diet (17 ppm). A subsequent loss in gain performance and immune response was also observed.

During the finishing phase, zinc metal amino acid complex has consistently shown an improvement in ADG, feed efficiency and carcass quality. A summary of 22 feedlot trials indicates a consistent response. The response occurred in a variety of geographic locations, cattle and ration types, time of year and weather conditions. The level of zinc in control diets was varied; however, the minimum was 119% of the NRC recommendations. The addition of zinc metal amino acid complex to feedlot diets significantly improved ADG (+3,26%).

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New advanced technology developed by Zinpro Corporation has produced Availa-Zn. This new generation product is a patented metal amino acid complex in a 1:1 ratio of metal to amino acid. Product attributes include superior bioavailability, rumen bypass quality and consistent improvement in animal performance. Availa-Zn offers feedlotters considerable cost-saving benefits through efficiency advantages in the patented manufacturing processes.

Zinpro and Chemuniqué are committed to improving the trace mineral status of your feedlot animals and therefore, more effectively producing beef. Talk to your nutritionist or feed sales representative about the inclusion of Zinpro Performance Minerals® in your beef cattle mineral supplements.