



Feeding Zinpro® Availa® 4 Improves Health and Performance in Shipping-Stressed Beef Calves



Study Objective



Determine the effects of feeding Zinpro Availa 4 in backgrounding diets, to stressed beef calves, on calf health and performance.

Study Duration



42-d backgrounding period; calves assigned to 0.42 ha paddocks with *ad libitum* access to bermudagrass hay and fed corn-soybean meal as carrier for mineral supplement treatments.

Animals



Male beef calves, 3 groups (n = 288, BW = 238 kg), purchased at sale barns and shipped to receiving facility.

Treatments

Inorganic: 360, 125, and 200 mg/d Zn, Cu and Mn from sulfate sources, respectively and 12 mg/d Co from cobalt carbonate

Zinpro Availa 4: Iso-levels of Zn, Cu, and Mn from amino acid complexes and Co from cobalt glucoheptonate

Location



University of Arkansas Beef Cattle Facility, Savoy, AR, USA

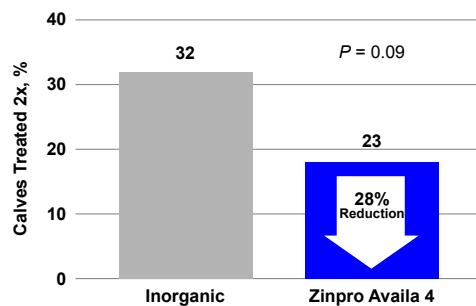


Results Summary

Feeding 7 g/hd/d Zinpro Availa 4 to calves:

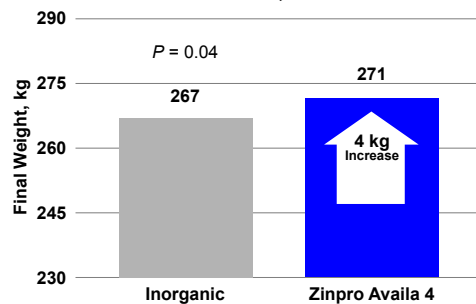
- Reduced antibiotic re-treatment rate
- Improved calf antibody titer responses to arrival respiratory vaccinations
- Increased calf ADG
- Increased calf d 42 final BW

Antibiotic Re-Treatment Rate

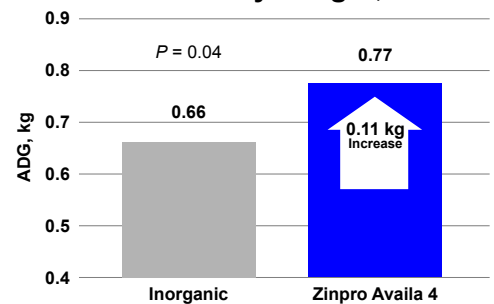


Feeding Zinpro Availa 4 as part of a mineral supplement strategy improves backgrounding steer performance and immunity responses.

Calf ADG, d 0 to 42



Final Body Weight, d 42



Items	Control	Zinpro Availa 4	Zinpro Availa 4 Advantage
In weight, kg	238	238	--
Purchase cost, \$/hd	595.00	595.00	--
BRD medication, \$/hd	5.18	4.37	0.81
Feed cost, \$/42 d period	50.00	50.00	--
Zinpro Availa 4 investment, \$	--	1.68	(1.68)
Total cost, \$/hd	650.18	651.05	(0.87)
Final BW, kg/hd	267	271	4 kg
Gross receipt, \$/hd	876.88	892.12	15.25
Profit, \$/hd	226.70	241.07	14.38
ROI	\$1.68	\$14.38	8.6:1

Kegley, E. B., M. R. Pass, J. C. Moore, and C. K. Larson. 2012. Supplemental trace minerals (zinc, copper, manganese, and cobalt) as Zinpro Availa 4 or inorganic sources for shipping-stressed beef cattle. 2012. Prof. Anim. Sci. 28:313–318.