



Availa® Zn

Increase Carcass Weight

Feed 60 ppm Zn from Availa Zn throughout the finishing period

BACKGROUND

A pooled statistical analysis examined the growth performance and carcass responses associated with feeding supplemental Zn from Zinpro Performance Minerals® (ZPM; ZINPRO® zinc methionine or Availa® Zn) in finishing cattle diets. The analysis represents 249 pens from nine studies conducted between 2001 and 2016 at university and commercial feedlot facilities.

- All studies evaluated Zn from ZPM vs. conventional inorganic Zn.
- Variables analyzed included both live and carcass-adjusted feedlot performance, carcass merit, and liver abscess incidence.
- Each pen within study was weighted to calculate mean effect size. More precise studies were assigned a greater weight. This precision was influenced by a greater number of pens, less variation between pens, or both.

OVERVIEW

Study	Location	Year	DOF	Head	ZPM (Source)	ZPM (ppm)
1	Texas	2001	152	270	Both	30 60
2	Kansas	2002	215	1,959	ZINPRO	47 103
3	Texas	2004	176	180	Availa Zn	35
4	Kansas	2006	181	2,015	ZINPRO	42 85
5	Texas	2011	154	2,879	ZINPRO	38
6	Texas	2011	165	1,798	ZINPRO	36
7	Alberta	2011	253	4,542	Availa Zn	39
8	Iowa	2014	87	321	Availa Zn	60
9	Iowa	2016	81	132	Availa Zn	60 90

+10 lbs
CARCASS WEIGHT

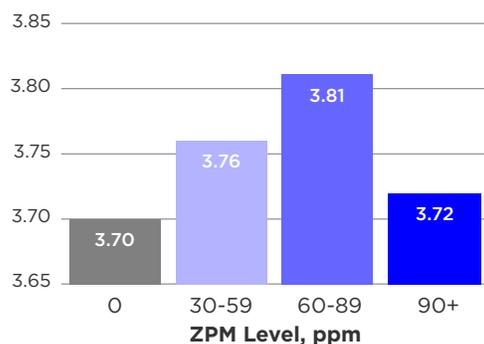
EFFECT OF ZPM FEEDING RATE ON PERFORMANCE AND CARCASS TRAITS OF FEEDLOT CATTLE

Item	ZPM rate, ppm				SEM	Contrasts ^a
	0	30 - 59	60 - 89	90 +		
Pens, n	113	57	57	22		
Initial BW, lb	748	744	748	748	3.6	NS
DM Intake, lb	21.8	22.0	22.0	21.9	0.56	NS
<i>Carcass-Adjusted Performance^b</i>						
Final BW, lb	1341	1346	1355	1345	32.3	Q
Daily Gain, lb	3.70	3.76	3.81	3.72	0.180	Q
Feed:Gain	5.85	5.81	5.76	5.85	0.229	Q
Dressing Percent, %	63.65	63.86	63.84	63.59	0.453	Q
Hot Carcass Weight, lb	856	860	866	859	18.8	Q
USDA Prime + Choice, %	46.3	48.6	49.0	52.3	0.09	L
Yield Grade, calculated	3.08	3.05	3.15	3.23	0.095	L
Total Liver Abscesses, %	10.3	10.0	7.0	9.5	1.98	Q, C
A+ Liver Abscesses, %	3.6	2.9	1.6	3.5	0.81	Q, C

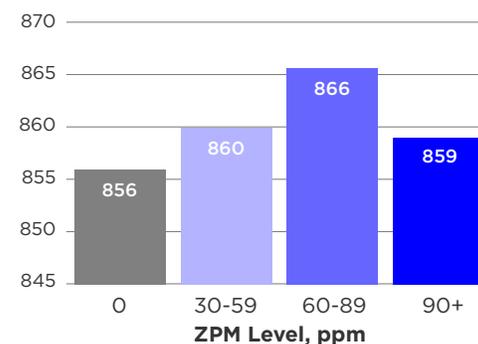
^a Significant: $P \leq 0.10$ (NS = not significant; L = linear; Q = quadratic; C = cubic).

^b Carcass-adjusted final weight = (average pen HCW) ÷ average dressing percent across all pens within study.

Carcass-adjusted ADG, lb/d
(Quadratic $P = 0.04$)



Hot Carcass Weight, lb
(Quadratic $P = 0.01$)



SUMMARY

- ZPM supplementation improved ADG, Feed:Gain, and Final BW on a carcass-adjusted basis ($P \leq 0.10$)
- Feeding ZPM increased dressing percentage and hot carcass weight ($P = 0.01$)
- Optimum ZPM response was realized at a feeding rate of 60 ppm
- Feeding 60 ppm Zn from Availa Zn is a reliable method to enhance the performance of feedlot cattle

Economics^a

- Supplementing Availa Zn at a rate of 60 ppm throughout the finishing period resulted in 10 lb of additional HCW
- This represents a Net Return of more than \$15.00 per head and an ROI of 4 to 1

^a Economics are based on a 22 lb DMI, 160 DOF, and \$120/cwt fed cattle price.



For more information:
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representative or visit
zinpro.com/beef