Effect of Increasing Availa®Zn Supplementation on Performance of Feedlot Cattle Fed Ractopamine

Study Objective
Evaluate effects of feeding increasing proportions of supplemental Zn from Availa®Zn in combination with ractopamine hydrochloride (RAC) on performance and carcass characteristics of finishing steers.

Animals
42 crossbred Angus steers (380 kg); daily individual animal intake measured.

Treatments
Control: Dry-rolled corn-based diet supplemented with 60 mg Zn from ZnSO₄/kg DM
Availa-Zn 30, 60, or 90: Control diet supplemented with 30, 60 or 90 mg Zn from Availa-Zn/kg DM; supplemented with RAC last 28 d.

Study Duration
Pre-RAC Period: 86 d
RAC Period: 28 d

Location
Iowa State University, Ames, IA, USA

Results Summary
Steers fed increasing levels of Availa-Zn with RAC had:
- Greater final body weight
- Decreased % KPH fat, lowest values among steers fed 60 ppm Zn from Availa-Zn
- Lower plasma haptoglobin concentration
- Decreased serum interleukin-8, lowest concentration among steers fed 60 ppm Zn from Availa-Zn

Feeding Availa®Zn enhances repartitioning effects of RAC, by increasing proportion of lean muscle and reducing carcass fat composition, while mediating the apparent inflammation response.

Availa-Zn with RAC Increased ADG, kg
- Control: 1.42 kg
- Availa-Zn 30: 1.50 kg
- Availa-Zn 60: 1.56 kg
- Availa-Zn 90: 1.90 kg

Availa-Zn with RAC Increased Gain/Feed
- Control: 0.122
- Availa-Zn 30: 0.120
- Availa-Zn 60: 0.152
- Availa-Zn 90: 0.178

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