

Metabolic biomarkers in heifers fed with r-zeta[®] additive in their diets

Munilla, M.E. & Vittone, J.S.

Department Ruminants, Agricultural Experimentation Station, National Agricultural Technology Institute
Concepción del Uruguay, Entre Ríos, Argentina

Introduction & Aim

The additive formulation includes flavorings that regulate intake, enzymes, microorganisms that modulate the gut microbiota, liver protectants, and anti-inflammatories. The aim of this work was to evaluate different rearing diet strategies with r-zeta[®] additive in heifers (192.6 ± 19.0 kg body weight, (BW)).



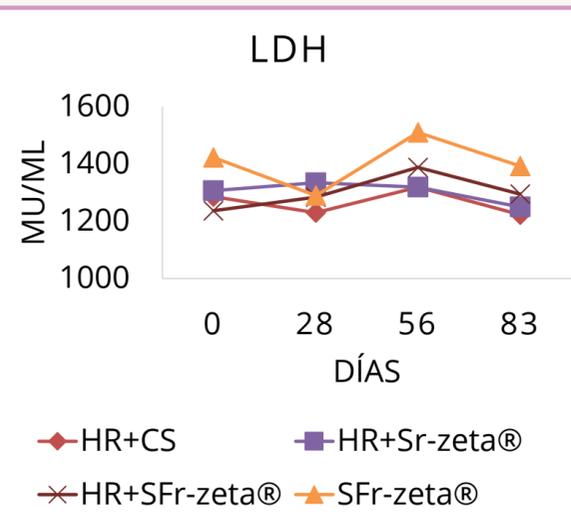
Method

Treatments:

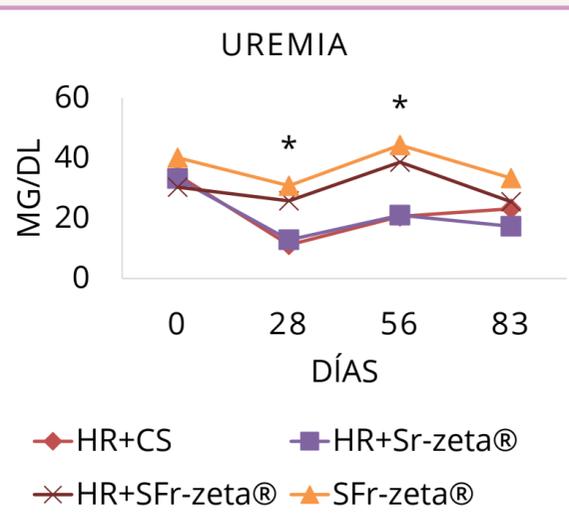
- HR+CS: hay roll (HR) and control supplementation at 1% BW;
- HR+Sr-zeta[®]: HR and balanced pellet r-zeta[®] supplementation at 1% BW;
- HR+SFr-zeta[®]: HR and self-feeding balanced pellet r-zeta[®] and
- SFr-zeta[®]: self-feeding balanced pellet r-zeta[®].

Whole-blood samples collected on days 0, 28, 56 and 83 to evaluate metabolic biomarkers: lactate dehydrogenase (LDH), uremia and glycemia.

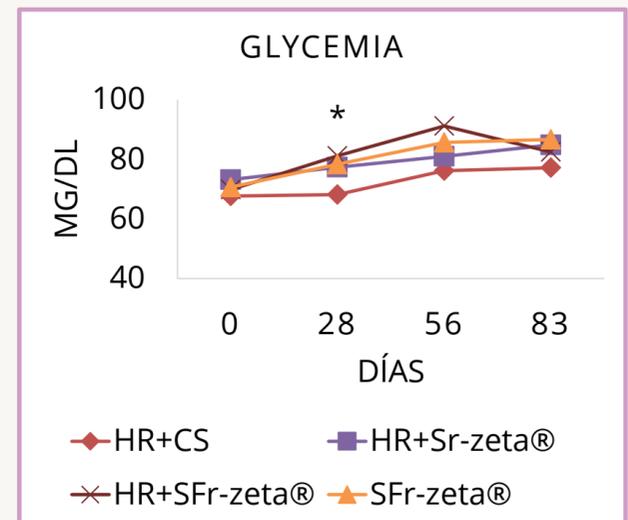
Results



RM ANOVA; p= 0.0713



RM ANOVA; p= 0.0143



RM ANOVA; p= 0.0174



Conclusion and future work

There was no negative effect on the metabolic variables studied when the additive was included in self-feeding diets without adaptation protocols.