Availa® Zn Improves Intestinal Integrity in Pigs Subjected to Heat Stress Conditions

Study Objective
Evaluate Availa® Zn as a mitigation agent for severe short-term heat stress (HS) in pigs.

Animals
32 crossbred gilts (64 kg BW)

Treatments
- **TN-CON**: thermoneutral conditions (TN) + *ad libitum* access to Control diet (120 ppm Zn from Zn sulfate)
- **HS-CON**: HS conditions + *ad libitum* access to Control diet
- **PFTN-CON**: TN conditions + pair-fed (PF) to their HS-CON counterparts
- **HS-Availa-Zn**: HS conditions + *ad libitum* access to Availa-Zn diet (60 ppm Zn from amino acid complex + 60 ppm Zn from Zn sulfate)

Results Summary
Availa-Zn supplemented to pigs during HS conditions helped to mitigate negative effects:
- Limited intestinal permeability and maintained transepithelial electrical resistance (TER)
- Decreased circulating serum endotoxins
- Improved pig acute phase response (LBP and lysozyme)

**Availa-Zn Limits Ileal FD4 Permeability, µg/min**

**Serum Endotoxin Circulation was Reduced with Availa-Zn, arbitrary units**