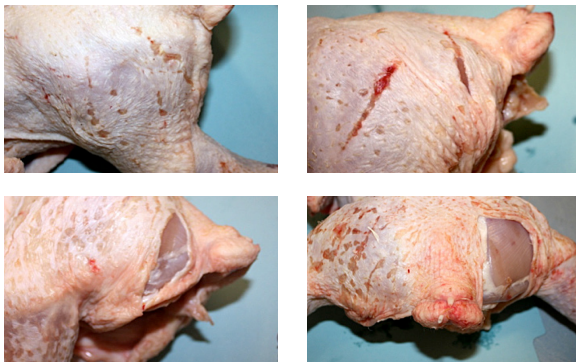


# Poultry Skin: Barrier and Healing



## The Role of Zinc for Maintenance of Skin Strength

Epithelial tissue (skin) provides a physical barrier between the animal and its environment. Handling broilers in the field during capture and industrial processing can generate skin tears, scratches and other injuries. These skin integrity issues represent significant losses to the poultry industry. Supplementing poultry diets with zinc from Availa<sup>®</sup>Zn zinc amino acid complex presents an opportunity to help improve skin integrity. Zinc is responsible for proliferation of keratinocytes<sup>1</sup>, which equates to protection and healing of skin tissue.



Supplementing poultry diets with zinc from Availa-Zn also reduces the prevalence and severity of pododermatitis.

### CONCLUSIONS

The inclusion of zinc from Availa-Zn zinc amino acid complex in broiler diets:

- Reduces sores, scabs, scratches and pododermatitis in chicken carcasses
- Increases skin strength

Figure 1. A study conducted at Auburn University showed that feeding zinc from Availa<sup>®</sup>Zn significantly reduced sores, scabs and scratches on the thigh and back of chickens.

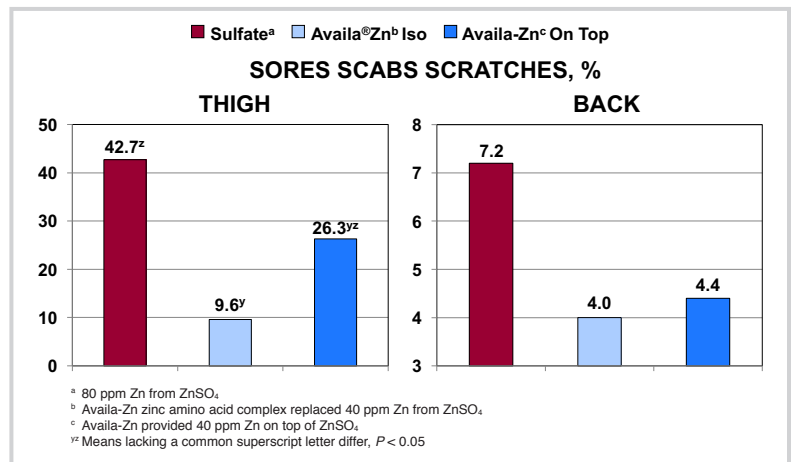
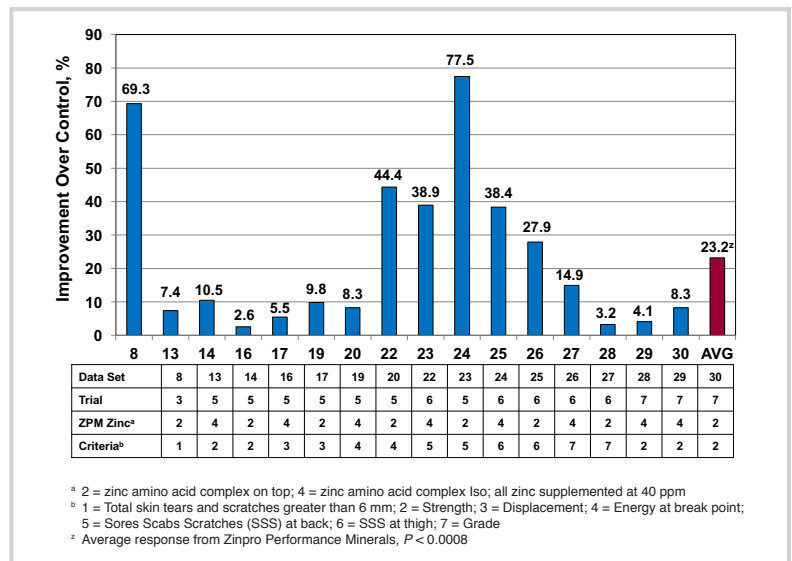


Figure 2. Improvement in skin strength is a major driver of the positive findings mentioned above. A compilation of 16 studies shows that feeding zinc from Availa<sup>®</sup>Zn can increase skin strength 23 percent on average.



Reference: <sup>1</sup> Tenaud *et al.* 1999. In vitro modulation of keratinocyte wound healing integrins by zinc, copper and manganese. British Journal of Dermatology.