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RELATIONSHIPS BETWEEN COLOSTRUM SUPPLY OF SUCKLING PIGLETS AND *SALMONELLA* PREVALENCE IN PIGLET REARING

A. Schulte Zu Sundern¹, C. Holling², K. Rohn³, J. Schulte-Wuelwer⁴, A. Deermann⁴, C. Visscher¹.

¹ Institute for Animal Nutrition, University of Veterinary Medicine Hannover, Germany; ² Pig Health Services, Landwirtschaftskammer Niedersachsen, Meppen, Germany; ³ Institute for Biometry, University of Veterinary Medicine Hannover, Germany; ⁴ EVH Select GmbH, Meppen, Germany.

Salmonella are still a problem in pork production. Increasing litter sizes observed in recent years with lower average birth weights at the same time makes an adequate colostrum supply of newborn piglets more difficult. This study tested the hypothesis, that modern piglet producing farms with a high farrowing rate and an increased *Salmonella* prevalence in piglet rearing show a more unfavorable colostrum supply in suckling piglets.

Methods

An association of 250 northern German piglet producing farms has been organizing a voluntary biannual health-status-monitoring on piglets (25 kg BW) for years. The monitoring includes an ELISA for *Salmonella* antibodies. On basis of these data 12 *Salmonella*-conspicuous and 12 *Salmonella*-inconspicuous farms were selected. Each farm was visited once 24-48 hours after the main farrowing day. On each farm 4 litters were sampled and 2 light-weight, 2 medium-weight and 2 heavy-weight piglets per litter were weighed and a blood sample was taken. The blood samples were tested for the colostrum supply by means of the Ig-Immunocrit-method.

Results

In this field study, there was a significant difference in Immunocrit values between the *Salmonella*-inconspicuous farms and *Salmonella*-conspicuous farms for the low weight piglets. There was no significant difference between the *Salmonella*-conspicuous and *Salmonella*-inconspicuous for the factor body weight, litter size and parity.

Conclusion

This study provides preliminary evidence that when comparing *Salmonella*-conspicuous farms and *Salmonella*-inconspicuous farms, colostrum supply could be a critical factor to be considered. The fact that there is no difference in the body weight of the two groups suggests that there may be differences in colostrum management. Further studies have to investigate the impact on the *Salmonella* seroprevalence at the time of slaughter.

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