



### **WELFARE & NUTRITION**

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IMPROVEMENT IN QUALITY OF SOWS AND ENVIRONMENT CAN REDUCE PREVALENCE OF INFLAMMATION AND NECROSIS OF TAIL, EAR, CORONARY BANDS, SOLES, HEELS AND CLAWS IN PIGLETS, WEANERS AND FATTENERS

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#### Introduction

Tail lesions in pigs can occur without any interactions with other pigs and in combination with inflammation and necrosis of the ears, coronary bands, soles, heels and claws. Based on this findings, we have introduced swine inflammation and necrosis syndrome as a new syndrome in swine at the ECPHM congress in Dublin in 2016. Low feed fiber content and inadequate water supply are among the most important triggering factors. We hypothesize that improving the quality of the sow and the housing system can improve the degree of SINS in piglets, weaners and fatteners.

#### **Material & Methods**

From a cohort of 120 hybrid sows, twenty sows with best and twenty with worst condition, respectively, were selected based on detailed scores from coronary bands, soles, heels, claws and teats. Half of the sows of each group (and their offspring) were kept under conventional conditions, while the environment of the second half was improved with drinking bowls, water disinfection and additional feeding of hay and straw. 115 suckling piglets, 113 weaners and 103 fatteners were scored for the degree of inflammation and necrosis of tails, ears, coronary bands, soles, heels and claws.

## Results

Environmental enhancement reduced inflammation and necrosis in tails, ears, coronary bands, soles, heels and claws of piglets by 50, 47, 9, 54, 2 and 33%, respectively. Corresponding values in weaners were 65, 29, 93, 21, 26 an 77%, respectively and for fatteners 100, 9, 100, 88, 41 and 100%, respectively. Significant effects of the sow's condition were only detectable under conventional environmental conditions, but disappeared with the improved environment.

# **Discussion & Conclusions**

The present study shows that inflammation and necrosis in pigs involves different body parts (syndrome). The problem starts early (with the sow). Improving the sow's and the environmental conditions can improve the problem.