



## **WELFARE & NUTRITION**

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# CLINICAL EXAMINATIONS OF LACTATING SOWS AND THEIR PIGLETS IN THREE DIFFERENT HOUSING SYSTEMS

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#### Introduction

This study deals with the influence of housing systems on the health of lactating sows and their piglets. Therefore, three different farrowing systems were compared: A. conventional farrowing crates (CON) B. free movement pens (FMP) and C. a group-housing system (GRP).

#### **Materials & Methods**

Examinations of the sows occurred at the day of introduction (t1), one week after parturition (t2) and at the last day of lactation period (t3).

General condition, vital signs, skin abnormalities and udder health were studied at each point of time, whereas claw lesions were examined at t1 and t3.

The examinations of the piglets were carried out on t2 and t3 regarding skin injuries, carpal and tarsal abrasions, sole bruising and coronet injuries. Additionally, typical piglet diseases, birth- and weaning weights as well as losses and their causes were recorded.

## **Results**

Skin injuries differed significantly between housing systems at t2 and t3, with GRP sows having the highest rates, also concerning the udder. From t1 to t3 there was a significant decrease of claw lesions in GRP sows.

Piglets exhibited differences in skin injuries between the housing systems especially at t3, with highest rates in GRP. FMP piglets showed highest weight gains followed by CON and GRP piglets (p<0.05). Losses, especially due to piglet crushing, were highest in FMP (25,8%), followed by GRP (19,8%) and CON (12,2%).

### **Discussion & Conclusion**

High rates of skin lesions can be explained by aggressive interaction between GRP sows as well as by cross suckling. Free movement in the GRP system had a positive influence on claw health of sows. Highest mortality rates due to crushing were seen in the first days of life (GRP, FMP) implementing that fixation of sows for the first days after farrowing in these systems would ameliorate survival rates of piglets.