
INCIDENCE OF BELLY NOSING IN SEGREGATED EARLY WEANING PIGS

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Summary

Segregated early weaning (SEW) was initially employed as a means of eradicating disease in swine operations. However, little is known about how management factors affect the incidence of belly nosing and belly sucking in early weaned pigs. A study was designed to investigate the effects of line difference, diet form and pen enrichment on the incidence of these behaviours in piglets weaned at seven days of age. Results indicate that line difference affects the incidence of nosing and sucking behaviours in early weaned pigs.

Introduction

Previous studies have shown that as weaning age in piglets decreases, the frequency of belly nosing and belly sucking increases. By studying how breed differences (Duroc versus Yorkshire) affect the amount of time spent nosing and sucking, the possibility of selecting lines better suited to the SEW environment arises. In addition, other factors such as number of days spent on a liquid diet post weaning, gender and pen enrichment (nipped troughs, inner-tubes, and control) may affect the incidence of these behaviours.

Experimental procedure

The incidence of nosing and sucking behaviours were studied in 291 piglets, housed in 19 pens, weaned at 7 days of age. Piglets were fed a liquid diet for either seven (L7) or 14 (L14) days following weaning, at which time they were switched to a dry pelleted diet. Pen environment was modified by providing either an air-filled inner-tube (Tube), rubber nipples (Nipples) in the feed trough, or neither (Control).

Pens were segregated by sex. Within pens, there were both Duroc and Yorkshire lines. Observations were made between 8:30 a.m. and 4:30 p.m. on two consecutive days when pigs were 10 to 23 days post weaning. Live observations, at five minute intervals, were made to determine the number of piglets belly nosing, belly sucking, and nosing and sucking on other parts of the body.



Example of pen enrichment through use of air-filled inner tube.

Results

Neither diet nor sex affected any of the behaviours. Nipples reduced the percentage of time spent belly sucking (1.10 per cent) compared to Tube (3.12 per cent) and Control (4.12 per cent) treatments. Nipples also reduced the total amount of sucking (1.57 per cent) compared to Tube (3.46 per cent) and Control (4.75 per cent). The Yorkshire line engaged in more belly sucking (3.97 vs. 1.58 per cent), total sucking (4.30 vs. 2.21 per cent), and belly directed (9.22 vs. 6.21 per cent) behaviour than did the Duroc

line. Significant line and environmental treatment interactions were present in several variables. In general, nipples reduced the level of sucking and belly directed behaviours in the Yorkshire line, but not in the Duroc line.

Conclusion

Line differences affect the incidence of nosing and sucking behaviours in early weaned pigs. Environmental treatments intended to reduce such behaviours may not be effective in all lines of pigs.

Acknowledgements

Strategic program funding provided by Sask Pork, Alberta Pork, Manitoba Pork and Saskatchewan Agriculture and Food Development Fund.

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