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TITLE

CAN DIETARY FIBRE LEVEL AND A SINGLE ENRICHMENT TYPE REDUCE THE RISK OF TAIL BITING IN UNDOCKED PIGS?

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CONTENT

Tail docking has been banned in the EU as a routine practice to control tail biting since 2008. However solutions are still needed to prevent tail biting in undocked pigs in conventional housing systems. This study evaluated the effectiveness of different dietary fibre levels and enrichment types at controlling tail biting in undocked pigs housed on fully-slatted floors. The experiment had a 2x2x2 factorial design, using 672 pigs in 48 pens, at a commercial stocking density. Pigs were provided with either a rubber floor toy (N=24) or a soft wooden post (*Picea sitchensis*) (N=24) in the weaner stage. After transferring to the finisher house (7 weeks post-weaning), enrichment type was swapped in half of the pens (N=24) while the remainder kept the same (N=24). From weaning to finishing, pigs were fed a diet with either a standard (weaner 4.2%; finisher 6.6%; N=24) or a higher level of crude fibre (weaner 5.9%; finisher 13.1%; N=24). Behaviour observations and lesion scores were used to assess tail biting severity. Pigs interacted more with the toy than the wood ($P<0.001$), and these pigs performed less tail and ear directed behaviours ($P<0.05$). This implies that the rubber floor toy was more effective at diverting biting behaviours away from other pigs. Pigs fed the higher fibre diet were also observed to perform more tail directed behaviours ($P<0.05$), contrary to the hypothesis. There was no effect of enrichment type or diet on lesion scores. In total 26 severe tail biting outbreaks occurred and almost 70% of the pigs had some degree of tail amputation. The study showed that simply increasing dietary fibre level with minimal enrichment provision is not enough to control tail biting among undocked pigs on fully slatted floors.