

Project Number & Title

1A:111 DEVELOPING WAYS TO MEASURE AND INCREASE SOW CONTENTMENT

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Aims and Objectives

The project aimed to identify indicators of contentment in sows, test their practicality in production settings, and assess how the provision of enrichment affects sow contentment, behaviour and performance in farrowing crates. This project involved two experiments. Experiment 1 was conducted in a research piggery. This involved best practice provision of enrichment (~1+ kg lucerne hay daily during farrowing and lactation) to test the effect of enrichment on sow contentment welfare indicators in detail. Experiment 2 took place at a commercial piggery to assess different types of enrichment (lucerne, straw and non-nutritive cotton rope; either only during farrowing or over the course of lactation) on sow contentment and performance and the practicality and robustness of welfare indicators under commercial conditions. A third independent study involved a control and sows offered lucerne chaff during and after farrowing.

Key Findings

In all studies, the provision of enrichment altered sow behaviour and the straw and lucerne treatments reduced still birth rates. In the large commercial study (Experiment 2) control sows exhibited less sham chewing and pain related behaviours than those on the enrichment treatments. There was also an indication in experiment 2 that enriched sows had a higher subsequent farrowing rate (FR) than controls with FR for the control and the hay treatment for two days before farrowing averaging 84% and 93% respectively.

Application to Industry

The findings suggest that enriching the environment of sows housed in farrowing crates before and after farrowing changes sow behaviour and biological function -the latter being expressed as reduced stillbirths and in study 3 increased colostrum intake and preweaning growth performance. Establishing the impacts of enrichment on cognitive behaviour and affective state requires further investigation.