Improving welfare of group housed sows: reducing frustration and aggression

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Background

There is growing pressure from consumers and large food retail chains to improve the care and welfare of breeding sows by eradicating the use of individual gestation housing. The general public and experts consider animal welfare to be improved under group housing situations, primarily due to the opportunity for exercise and social and environmental interaction provided. However, the aggressive encounters which inevitably occur under group housing conditions exert a negative impact on animal welfare, as well as causing reproductive failures and structural damage. It seems inevitable that legislation will favour a phase out of individual stalls to be replaced by group housing systems. Therefore, to maintain industry productivity and profitability, whilst optimising sow welfare, it is imperative that strategies are developed to reduce aggression. Competition for resources, such as food, has been identified as a trigger of inter-animal aggression. It is current industry practice to feed sows a relatively high density, rapidly digestible diet during the first 14 – 28 days post-insemination, with the aim of maximising embryo implantation and thus farrowing rates and litter sizes. However, we postulate that this strategy promotes rapid consumption of food and promotes aggressive encounters at feeding times. In addition, the rapidly digestible nature of the feed likely fails to induce feelings of satiety, resulting in increased physical activity and 'frustration' and altering time budgets in favour of aggression.

The proposed study will, therefore, test the hypothesis that providing group housed sows and gilts with a high fibre, slowly digestible diet will reduce incidences of aggression, as evidenced by behavioural measures and injury scores, whilst maintaining reproductive output.

(There may be a Pork CRC scholarship attached to this project)