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TITLE

THE INFLUENCE OF A 16-HOUR DELAY IN SOLID FEED PROVISIONING ON THE FEED INTAKE AND PERFORMANCE OF WEANLING PIGLETS

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CONTENT

A large proportion of newly weaned piglets starts consuming solid feed only after weaning is complete. Moreover, weaning day is stressful. Piglets may associate this stress with ingesting pelleted feed, thus reducing consecutive feed intake. An experiment was therefore designed to study the effect of delayed provisioning of solid feed on feed intake and performance of piglets. In total, 144 piglets (8.1±1.1 kg, mean±SD), weaned at 4 weeks of age, were tested. They were assigned to 24 pens, blocked per sex (castrated male or female) and weight group. Littermates were assigned to different pens. Prior to weaning, piglets received a commercial creep feed. Per body weight class and per sex, each pen was randomly assigned to one of the 2 treatments: control (C) and delay in feed provisioning (F). For the control treatment, the pelleted (6 mm) feed was already present in the feeders when the piglets arrived in their pens (13:00-14:00). In the F pens, the feed was provided the next morning (08:00). Feed and water were provided ad libitum. They received natural daylight and supplemental artificial light between 7h30 and 15h30. The F pigs showed a higher feed intake the first three weeks of the experiment (455 vs 430 g/day, P=0.003), which was still apparent for the entire experiment (4-9 weeks: 594 vs 569 g/day, P=0.046). This resulted in higher bodyweights 3 weeks after weaning in the F vs C pigs (16.1 vs 15.6 kg, P=0.005). However, at the end of the experiment at 9 weeks, no significant difference was observed (23.9 vs 23.4 kg, P=0.285). Feed efficiency did not differ significantly between the groups (P=0.456 for the entire experiment). Further research is needed to elucidate the causative factors for the observed differences and to further explore the practical implications of our findings.

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