Born2Live
Abstract til International Congress on Pig Reproduction
Ghent, Belgien, juni 2023

STØTTET AF

Svineafgiftsfonden

Abstractets titel:

Feeding level and dietary composition the last 3-6 days prior to farrowing reduced still born piglets in hyper-prolific sows

Forfattere:

Hojgaard, C.K.[1], Feyera, T [2], Theil, P.K.[2], Bruun, T.S.[1]
[1] Nutrition & Feeding, SEGES Innovation, Aarhus, Denmark
[2] Department of Animal and Veterinary Sciences, Aarhus University, Foulum, Denmark

Recent small-scale studies from Aarhus University indicated that providing a feeding level of 3.7-4.1 kg/day and selecting fibre sources like i.e., sugar beet pulp prior to farrowing improved farrowing dynamics. Thus, a follow up large-scale trial was designed in two commercial herds to substantiate the above findings with the aim of investigating the effect of different feeding levels and the use of a starch and fibre rich transition feed supplement on stillbirth rate and piglet survival day 0-5 post farrowing. A total of 902 parity 3 to parity 7 sows were stratified for parity and assigned to one of three feed levels (Group 1: 2.8 kg/d lactation diet; Group 2: 3.7 kg/d lactation diet; and Group 3: 2.8 and 0.9 kg/d lactation diet and transition feed supplement, respectively). The lactation feed (9.3 MJ NE/kg; 128.4 g SID CP/kg and 414 g starch/kg) mainly consisted of wheat (37.7%), barley (37.5%), soybean meal (14.1%), sunflower meal (3.0%), dried sugar beet pulp (2.5%), and added fat (1. %), whereas the transition feed supplement (9.7 MJ NE/kg; 71.7 g SID CP/kg and 482 gstarch/kg) main contents were wheat (76.8%), dried sugar beet pulp (6.6%), cake flour (5.0%), and oat hulls (4.5%). Sows in Group 1, 2, and 3 were supplemented with 499, 649, and 659 g/d of fibre (insoluble + soluble), respectively. The daily supply of standardized ileal digestible protein was 361, 476, and 421 g/d in Group 1, 2, and 3, respectively. Sows were fed the dietary treatments during the last 3-6 days of gestation in three similar-sized meals per day at 0500, 1130, and 2300 h. The effect of dietary treatment on several responses, including proportion of stillborn piglets of total born, piglet mortality until day 5 postpartum, sows treated at least once against MMA, and sows that received at least one farrowing assis-tance were performed, was analyzed using a mixed logistic model. The model included treatment as fixed effect and sow parity, week batch and herd as random effects. Pairwise comparisons were made between Group 1 and 2, and 1 and 3, respectively. The proportion of stillborn piglet was significantly greater (P=0.03) in Group 1 (11.8%) as compared with Group 3 (10.1%) but did not differ from Group 2 (10.8%; P=0.23). The number of total born piglets (22.0, 22.4, and 21.8; P=0.17), piglet mortality until day 5 postpartum (9.3, 9.9, and 10.0%; P=0.482), and the proportion of sows receiving at least one birth assistance (32.2, 29.6, and 28.0%; P=0.490) as well as the proportion of sows treated against porcine dysgalactia syndrome (27.5, 24.0, 24.4%; P=0,517) did not differ between Group 1, 2, and 3, respectively. The results indicated that in hyper-prolific sows giving birth to large litters, optimal energy allowance combined with fibre supply prior to farrowing is important to reduce the rate of stillborn piglets, whereas this feeding strategy failed to reduce piglet mortality the first five days postpartum.