

© 2015 Universities Federation for Animal Welfare
The Old School, Brewhouse Hill, Wheathampstead,
Hertfordshire AL4 8AN, UK
www.ufaw.org.uk

Animal Welfare 2015, 24: 185-192
ISSN 0962-7286
doi: 10.7120/09627286.24.2.185

Effect of different management techniques to enhance colostrum intake on piglets' growth and mortality

R Muns*, X Manteca and J Gasa

Servei de Nutrició i Benestar Animal, Departament de Ciència Animal i dels Aliments, Facultat de Veterinària, Universitat Autònoma de Barcelona (UAB), Bellaterra 08193, Catalonia, Spain

* Contact for correspondence and requests for reprints: rmunsvila@gmail.com

Abstract

An experiment was conducted to study the effect four different management techniques to enhance colostrum intake had on piglet and litter performance. Treatments were performed on piglets born weighing 1.30 kg or less (SP) within 6 h of birth: control group (CON); split-nursing of the litter for 2 h allowing only the SP piglets free access to teats (SPLIT); oral supplementation with 15 ml of sow colostrum to the SP piglets of the litter (COL); and oral supplementation with 3 ml of an energy product (Calostrene®) to the SP piglets of the litter (EN). Thirty-nine primiparous sows (Large White × Landrace) and their litters (507 piglets) and 100 multiparous sows and their litters (1,375 piglets) were used. Litters were fixed at 12 piglets. Piglets were weighed through lactation. Mortality was recorded. For primiparous sows, oral supplementation with COL enhanced SP piglets bodyweight (BW) at day 1 compared to CON, SPLIT, and EN. However, no differences on BW were observed at day 18 nor on litter total pre-weaning mortality. Nonetheless, lower SP piglets' mortality rate was found in CON and EN compared to SPLIT and COL groups in primiparous sows. For multiparous sows, no differences among treatments were observed for SP piglets BW at day 1 or at day 18. Primiparous sows' SP piglets had higher BW at day 1 than multiparous sows' SP piglets. Colostrum supplementation of low birth weight piglets improved early weight gain in piglets born from primiparous sows, probably by enhancing their colostrum intake, but it did not affect piglets' weaning BW or pre-weaning mortality.

Keywords: animal welfare, colostrum intake, colostrum supplementation, management routines, pig, sow