Ensuring colostrum to the smallest piglets

Report no. 736 February 14, 2006

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Abstract

The birth weight greatly influences whether the piglet makes it to weaning. The smaller the piglet is at birth, the greater is the risk of the piglet dying. This is due to, among other things, an insufficient colostrum intake of the small piglets. If the biggest piglets are moved from the litter, the small piglets will have better access to the colostrum. It was therefore studied whether it is possible to move/isolate the biggest piglets six hours after farrowing is complete and thereby improve the survival chances of the smallest piglets.

The trial was conducted in one herd and comprised 68 litters. Only litters with more than 11 liveborn piglets were included in the trial. The piglets were divided into "small piglets" with a birth weight of 0.5-1 kg and "big piglets" with a birth weight of 1.1-2.4 kg.

In the control group, all the piglets stayed with the sow for minimum 12 hours after farrowing, after which cross-fostering was performed.

In the trial group, the litter size was reduced to 10 piglets approx. six hours after farrowing by either moving some of the biggest piglets (on average 4.9 piglets/litter, weighing 1.2-2.4 kg) from the sow (cross-fostering) or isolating them in the covered creep area for four hours. The smallest piglets thereby had more room at the udder. Approx. 12 hours after farrowing, the litters were adjusted to the desired size by moving piglets to or from the litter.

14% of the piglets weighed 0.5-1 kg at birth (small piglets). There was an average of 14 and 15 liveborn piglets, respectively, in the litters in the control group and trial group. Piglet mortality was 12% in both groups.

Mortality among the small piglets was 28% and 34%, respectively, in the control group and the trial group (p=0.64). There was no significant difference in mortality for the small piglets in the two groups. However, this may be because the trial was designed to show a 15% difference as being significant. Mortality among the big piglets was 9% and 8%, respectively. There was thus no negative effect in the form of increased mortality for the big piglets in the trial group that were isolated from the sow or cross-fostered to other sows six hours after birth. With mortality rates among the small piglets of 28% and 34%, respectively, there is still a potential in reducing the mortality among the smallest piglets.

Mortality did not drop by ensuring colostrum for the smallest piglets when litter size was reduced to 10 piglets for four hours. Nor did it affect the mortality among the big piglets when they were isolated from the sow or moved from the sow already six hours after farrowing was complete.