Comparison of bovine colostrum whey and defatted bovine colostrum supplementation on piglet post-weaning growth check

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We showed previously that the incorporation of 2% of bovine colostrum (BC) whey in piglet diet reduces the post-weaning (PW) growth check. The objective of this new study is to reduce the costs of the treatment by replacing BC whey with defatted BC, a product which is 50% less expensive to produce (50 €/kg of defatted BC *vs.* 100€/kg of BC whey).
Ninety-six piglets weaned at 26 ± 2 days of age (8.1 kg) were assigned to three treatments. Each group of piglets received a commercial diet supplemented with 10 $g.kg^{-1}$ of: i) milk ("Milk 1"), ii) defatted bovine colostrum ("Col 1") and iii) bovine colostrum whey ("Whey 1") for 10 days. Then, all the piglets received the commercial diet without any supplementation. Bodyweight and feed intake were measured two times a week for three weeks. Faecal *Lactobacilli spp.* and *E. coli* counts were determined the day before weaning and on days 2, 5 and 8 PW by real time PCR. A difference in the ADFI between the "Whey 1" and "Col 1" treatments was observed at the end of the first week PW (from days 4 to 7). During this period, piglets receiving the defatted BC showed a higher feed ingestion compared to piglets from the "Whey 1" treatment (+ 26%, $P < 0.05$). Concomitantly, the ADG tended also to be higher over this period (+ 23%, $P < 0.1$) for the piglets receiving the defatted BC. The third week of the trial, the ADG of the "Col 1" treatment was higher than the "Milk 1" and "Whey 1" treatments. No differences between the treatments were shown for the faecal flora. We may conclude from these results that defatted bovine colostrum is at least as good as BC whey to reduce post-weaning growth check, allowing to reduce the costs of the treatment by 50%.