Pre-farrowing maternal supplementation of caffeine or creatine can improve piglet survival and performance

Investigator: Dr Will van Wettere, University of Adelaide

Purpose: Commercial validation study to determine whether adding creatine (75 g/day) or caffeine (3 g/day) individually or together to sow diets prior to farrowing would reduce piglet mortalities and increase piglet growth to weaning.

Take home messages:
- Neither supplement affected stillbirth rates
- 3 – 6 days of caffeine supplementation pre-farrowing decreased piglet mortality by 0.24 piglets per litter by 21 days of age
- 3 – 6 days of caffeine supplementation pre-farrowing increased litter weight by 3.4kg on day 21 in gilts
- 4 or more days of creatine supplementation pre-farrowing for gilts reduced piglet mortality by 0.29 piglets per litter during the first 24 hours of life
- There were no beneficial effects of combining the two supplements
- Cost of supplementation was $0.83/day for creatine and $0.92/day for caffeine.

Additional information:
- For further information or a copy of the final report please contact Dr Rebecca Athorn at rebecca.athorn@australianpork.com.au or 02 6270 8827

APL Project 2016/073 – Effect of maternal supplementation with creatine and caffeine prior to farrowing on piglet growth and survival: a commercial study