



IMPROVING PIGLET SURVIVAL AND GROWTH WITH CREATINE AND CAFFEINE

EFFECT OF MATERNAL SUPPLEMENTATION WITH
CREATINE AND CAFFEINE PRIOR TO FARROWING ON PIGLET
GROWTH AND SURVIVAL: A COMMERCIAL STUDY

Project Participants

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Problem

Sub-optimal pre-weaning survival reduces the efficiency and profitability of the Australian pig industry. There is a need for a cost-effective and easy to adopt method of reducing pre-weaning mortality.

Project

The project aimed to determine whether caffeine and creatine supplementation in the lead up to farrowing would reduce stillbirths, increase piglet viability at birth, and improve pre-weaning growth and survival.

Value for Producers

Adding creatine to gilt diets can improve piglet vitality and reduce pre-foster mortality. The addition of caffeine to both gilt and sow diets can reduce mortality to day 21 of liveborn piglets and increase the weight of gilt litters on day 21.



Recommendations

Adding 75 grams of creatine to gilt diets each day for five days prior to farrowing can decrease pre-foster mortality in gilt litters, resulting in an increased suckled litter size 24 hours post-birth.

Adding 3 grams per day of caffeine to gilt and sow diets each day for three days prior to farrowing can decrease total mortality between birth and day 21, and increase the weight of gilt litters on day 21.

Combining both supplements is not beneficial and may even have negative effects.

Given the relationship between piglet viability and sow crushing behaviours in low confinement farrowing housing, creatine supplementation may be applicable to those systems during or immediately after the sow has given birth.

More Information

- For a copy of the manual, contact Rachael Bryant at rachael.bryant@australianpork.com.au
- For technical information, contact Rebecca Athorn at rebecca.athorn@australianpork.com.au