

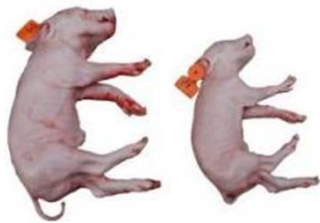
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# **Within-litter variation in birth weight: impact of nutritional status in the sow**

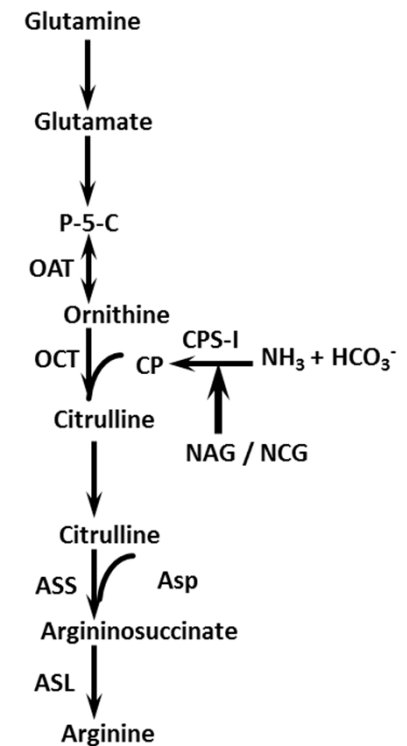
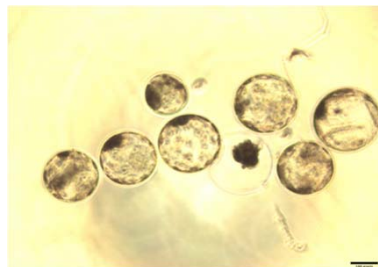
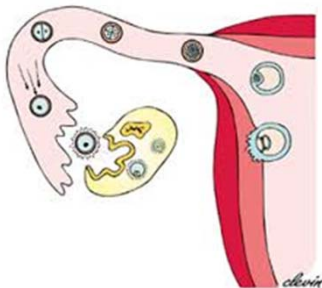
**Key words:** Within-litter variation, Pig, Mortality, Morbidity, Growth, Sow nutrition

# Research Summary

This review mainly focused on the within-litter variation in piglets birth weight, and summarized this issue from following aspects:

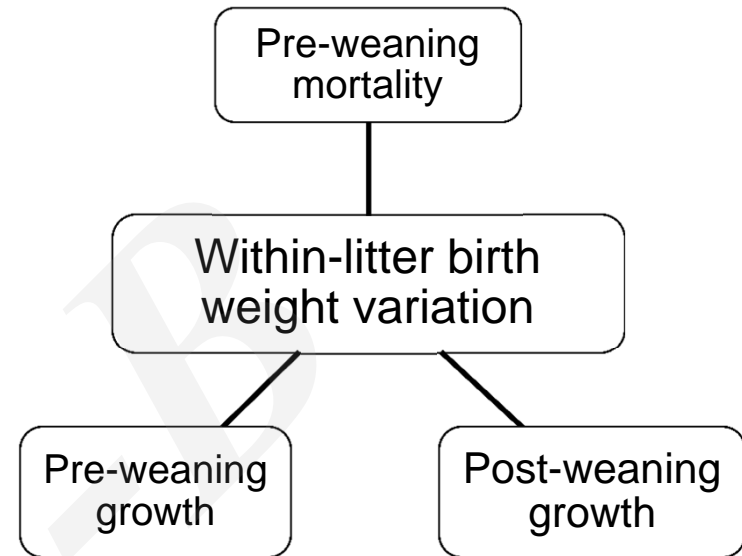


- Negative effects of within-litter birth weight variation on postnatal pigs
- Causes for within-litter birth weight variation
- Strategies to improve this issue



# ***Innovation points***

- **Introduction** of the negative consequences related to piglets in litters with high variation in birth weight from three aspects
- **Summary** of the most updated research progress about causative factors responsible for within-litter birth weight variation
- **Emphasis** of the effects of nutritional strategies during three critical window stages of pregnancy on improving litter homogeneity



## **Breed characteristics:**

- Oocytes quality
- Duration of ovulation
- Capacity of implantation
- Efficiency of placenta

## **Sow nutritional state**

## Three critical pregnancy stages:

- Pre-ovulation;
- Peri-implantation;
- Late gestation periods