EFFECT OF NUCLEOTIDE SUPPLEMENTATION IN SOWS DIET IN THE DEVELOPMENT OF WEANED PIGLETS

E. BORDA², A. PALOMO¹, E. FABIAN² & A. LÓPEZ¹
¹ SETNA NUTRICIÓN, MADRID, SPAIN - ² BIOIBERICA S.A., PALAFOLLS, BARCELONA, SPAIN

INTRODUCTION

Pigs have an epitheliochorial placenta, which is impermeable to different substances such as immunoglobulins or nucleotides. Nursing pigs receive dietary nucleotides via colostrum and milk. So, sow’s milk is the only source of the nucleotides for the piglets, which is why the amount of these nutrients transferred during lactation is critical in order to protect neonates from:

- future intestinal disorders
- and immune function

OBJECTIVE: Evaluate the effect of dietary supplementation of a nucleotide preparation (Nucleoforce Piglets™) from 1 week before farrowing time and during weaning period of piglets.

RESULTS

**ANIMALS AND EXPERIMENTAL DIETS**

- 72 multiparous sows (GENE+) distributed in 3 treatments
- Experimental diets were provided to the sows 1 week before farrowing till the weaning of the piglets
- Diets were divided into:
  - Diet 1: basal diet without nucleotides (control)
  - Diet 2: basal diet supplemented with nucleotide preparation at 250 ppm
  - Diet 3: basal diet supplemented with nucleotide preparation at 500 ppm
- 796 total piglets were distributed as follows:
  - 264 piglets in diet 1 (control diet)
  - 266 piglets in diet 2 (nucleotides included at 250 ppm)
  - 266 piglets in diet 3 (nucleotides included at 500 ppm)

**EXPERIMENTAL DESIGN**

- Monitoring at birth, nursery and at the end of post-weaning period.

**Sows**

- Performance parameters: Body Weight (BW), ADG, Feed Intake, FCR
- Reproductive parameters:
  - weaning-to-oestrus interval,
  - breeding and pregnancy rate,
  - litter size (born alive, stillborn, total born),
  - piglet lactation mortality,
  - weight gain per litter

**Piglets**

- Performance parameters: Body Weight (BW), ADG, Feed Intake, FCR
- Health indicators:
  - Mortality
  - Diarrhea

**ANALYSIS**: All performance dates have statistical significance by SAS.

**CONCLUSIONS**

- Dietary supplementation with nucleotides preparation at 500 ppm for sows 1 week before farrowing until weaning period was completed, significantly improves the performance of the weaned pigs.

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