THE EFFECT OF BIRTH-WEIGHT ON GROWTH PERFORMANCE AND MEAT QUALITY IN IBERIAN PIGS

Vázquez-Gómez M1, García-Contreras C2, Astiz S2, Olivares A1, Fernández-Moya E, Palomo A, González-Bulnes A2, Óvilo C2 and Isabel B1

1 Faculty of Veterinary, UCM, Madrid, Spain 2 INIA, Madrid, Spain 3 Ibéricos de Arauzo SL, Salamanca, Spain

The variability of Birth-Weight (BIW) in lean commercial swine breeds is known to cause lack of homogeneity in growth patterns and meat quality affecting profitability.

This may be more severe in fatty and traditional breeds because of its lower reproductive and productive parameters, but there is scarce information for these breeds.

Evaluation of BIW effect on postnatal growth and carcass and meat quality in fatty pigs as Iberian pigs.

**WHAT HAVE WE FOUND?**
- **FEED CONVERSION RATE (FCR; kg/kg, each 5w)**
  - At 110 days-old: Low Very Low BIW pigs showed a catch-up growth
  - At 150, 180 & 210 days-old: Low Average BIW pigs
  - Very low BIW pigs → The highest FCR

- **AVERAGE DAILY WEIGHT GAIN (ADWG)**
  - Averages calculated by sex and BIW

- **CARCASS QUALITY**
  - Carcass Length

- **DECREASES 28 d/kg BIW increased**

- **IMF**
  - Very Low BIW pigs
  - Shows LESS GROWTH and MEAT QUALITY than heavier pigs.

- **PHOSPHOLIPIDS**
  - Monounsaturated FA
  - Saturated FA

- **TRIGLYCERIDES**
  - P <0.01

- **ADWG**
  - P <0.05

- **Carcass Length**
  - P <0.05

**HOW HAVE WE DONE IT?**
- **MEAT QUALITY**
  - Logissimus dorsi
  - Fatty Acids (FA) in
  - Intramuscular Fat (IMF)
  - Neutral Fraction (triglycerides)
  - Polar Fraction (phospholipids)

**WHAT HAVE WE DONE?**
- Evaluation of BIW effect on postnatal growth and carcass and meat quality in fatty pigs as Iberian pigs.

**KEY IDEAS**
- Despite catch-up growth, pigs with LIGHTER BIW showed a WORSE DEVELOPMENT during the growing-fattening phase and LOWER CARCASS AND MEAT QUALITY than heavier pigs.

- FEMALES showed LESS GROWTH and MEAT QUALITY than males.

- WHY IS THIS INTERESTING?
  - Evaluation of BIW effect on postnatal growth and carcass and meat quality in fatty pigs as Iberian pigs.