How can farmers manage low birthweight pigs profitably?

Birthweight and the early management of pigs affect their lifetime performance and are key to their profitability, but recent research indicates that low birthweight pigs may have the capacity to catch up with their littermates.

What factors affect growth?
Performance of pigs results from a complex interaction of factors including:

- Production system.
- Nutrition available to the sow before giving birth and before weaning.
- Competition from siblings in the litter.
- Supplementary and post weaning feed.

What does the research show?
Some lightweight pigs naturally make up their deficit and new evidence shows that:

- Growth performance to slaughter is not solely reliant on birthweight.
- Weight at weaning is also significant and may indicate the potential for making up low weight.
- Piglet body shape at birth, particularly abdominal circumference and BMI (body mass index derived from weight/body measurement ratio), may be a more reliable indicator of future performance than weight alone.
- Specialist feed formulated for low birthweight pigs post weaning can boost them to normal weight.

What approaches will provide producers with the best return?
Some pigs grow markedly more slowly than their contemporaries in the same production systems but discrepancies may be managed:

- Low birthweight pigs with low body mass index (ie disproportionately long and thin) may benefit more from supplementary specialist feed.
- Grouping light birthweight pigs before weaning can be helpful as it reduces competition, but this needs to:
  - Be done soon after birth – later attempts at cross-fostering will disrupt teat order.
  - Involve grouping sufficient numbers of piglets together to maintain high milk demand and avoid lactational oestrus in the sow.
- Targeting of additional high quality feed (high digestibility, high lactose content, inclusion of cooked cereals) to light pigs only in the starter regime can be cost effective.
This briefing was written by Professor Ilias Kyriazakis and draws on research projects carried out at Newcastle University, with financial support from AHDB Pork.

Views expressed in this publication are the sole responsibility of the author.

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