

HARPER ADAMS–FORFARMERS TRIALS HIGHLIGHT POTENTIAL OF MODERN GENOTYPE

ForFarmers’ Dr Charlotte Evans explains how lower density starter diets can deliver improved lifetime performance

Feeding lower density starter diets doesn’t necessarily equate to lower performance when it comes to overall health, growth and feed efficiency, according to ForFarmers national pig technical advisor Dr Charlotte Evans.

In many cases where high health, higher intake genotypes are being fed, within a low pathogen environment, a lower density diet may provide the best nutritional solution. There are also instances where the removal of zinc (when not required) has led to higher feed intakes, she said.

Despite removing zinc from its starter diets ahead of the 2022 zinc oxide ban, Harper Adams University’s pig unit has consistently achieved top 10% growth rates.

The 230-sow farrow-finish unit’s facilities include an indoor crated farrowing system with a milk line and specialist post-weaning accommodation to more easily allow individual weights and pen-level FCR to be monitored up to 40kg.

After the latest re-population, the unit has maintained a high health status and is running with the JSR 9T x JSR Tempo, which is associated with high prolificacy and also

higher weaning weights, intake levels and subsequent growth. ForFarmers partnered with it in trial work last year.

Dr Evans said: “We wanted to demonstrate the impact of feeding lower density diets on high health, highly prolific genotypes, optimise regimes in light of genetic development, and generate more data and insight to help our customers manage the zinc situation; one of the biggest challenges producers are facing.”

THE TRIAL

The trial started with 348 piglets at birth, with 216 through to post-weaning, up to 40kg, in specialist accommodation. Piglets were fed on ForFarmers’ VIDA milk replacer, followed by VIDA prestarter, fed as supplementary feed to milk, and a choice of different VIDA starter regimes starting seven days immediately pre-weaning.

The same feed was fed seven days pre- and post-weaning to provide continuity around this stressful time. In line with current unit practice, no zinc was fed within any of the starter regimes.



Dr Charlotte Evans

The key results included:

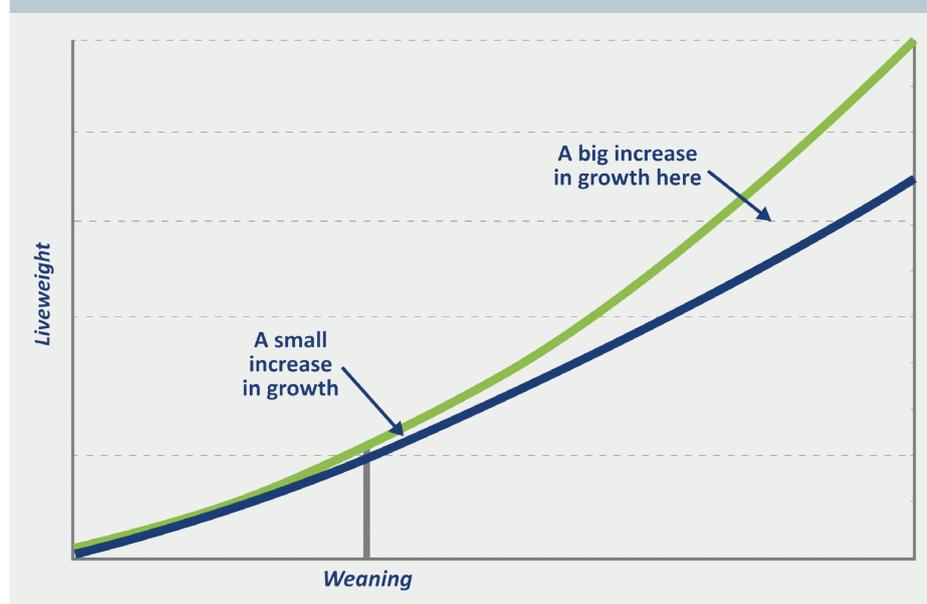
- Average 9kg weaning weight, 14.5 pigs per litter, 130.3kg litter weaning weight
- Pigs consumed an average of 1.4 litres of supplementary milk pre-weaning and over 500g dry matter pre-weaning on the lower density diets, exceeding the recommended target
- Post-weaning, pigs ate more of the lower density diets and also converted better, resulting in a lower cost per daily gain
- 220g daily growth rate in the first week after weaning (FCR 1.07), with some pigs achieving 500g+/day).
- This rose to 496g/day from one to three weeks post-weaning (FCR 1.15) and 745g/day (FCR 1.75) from three to eight weeks post-weaning
- An extra 10g growth in the first two weeks post-weaning can result in 1.3 fewer days to slaughter or 1.1kg heavier (see graph).

Dr Evans said: “Pigs fed the lower density diets performed better in terms of growth and feed efficiency, demonstrating the importance of aligning intake levels with nutrient requirements. So, if intake is high, pigs don’t need a high concentration of nutrients, but if intake is low, pigs require a higher concentration. Oversupplying nutrients can exacerbate underlying health issues.

“As we reduce dependence on zinc, it’s important to focus on diets that support gut health, and reduce undigested protein entering the hindgut by matching intake with nutrient availability.

“The results show the absolute potential of some of our herds.”

EFFECTS OF EARLY GROWTH RATE ON LIFETIME PERFORMANCE. THE GRAPH DEMONSTRATES THAT INCREASING GROWTH IN THE EARLY STAGES WILL RESULT IN BETTER PERFORMANCE OF THE FINISHED PIG



Harper Adams was the 2019 National Pig Awards Overall Producer of the Year, after judges recognised its staff commitment to high productivity and new innovation, and its commitment to the industry and role in recruiting the next generation.