



Australasian Pork Research Institute Ltd APRIL

PROJECT SUMMARY

A3A-103: *Feeding a single diet to pigs in the grower/finisher stage to reduce feed costs and improve feed efficiency*

Project Leader: Dr Karen Moore (Pork Innovation WA)

Project Participants: Dr Diana Turpin (Murdoch University)

Aims and Objectives:

To develop a feeding strategy which will reduce feed costs, improve intramuscular fat and which is easy to implement and adopt by producers.

Hypotheses:

1. Feeding a single diet will reduce the cost of feeding pigs compared to the phase system without adversely affecting pig growth performance and carcass assessments.
2. Feeding a single diet targeted to meet lysine (Lys) requirements at either 60 or 70 kg liveweight will reduce the cost of feeding pigs compared to feeding a single diet targeted to meet Lys requirements at either 50 kg liveweight.
3. Pigs fed a single diet will have more intramuscular fat than those receiving the phase diet.

Experimental design:

Four feeding strategy treatments (from approximately 23 to 100 kg liveweight (LW)):

1. Phase feeding – four diets fed from 25 to 110 kg LW.
2. Single diet formulated to meet requirements at 50 kg LW (Single 50).
3. Single diet formulated to meet requirements at 60 kg LW (Single 60).
4. Single diet formulated to meet requirements at 70 kg LW (Single 70).

Key Findings:

1. No adverse effects of feeding strategy on performance, the carcass, intramuscular fat or backfat.
2. A statistical trend for pigs who received the Single 60 or Single 70 diet to have an improved feed conversion ratio compared to those fed the Phase or Single 50 diet.
3. It was cheaper (Feed costs/kg LW gain) to feed pigs the Single 70 and Single 60 diets compared to the Single 50 and Phase diets.

Applications to Industry:

1. Grower-finisher pigs may be fed the same (single) diet (targeted to their Lys requirements at either 60 or 70 kg LW) with no negative effects on growth performance or carcass quality.
2. Feeding a single diet to pigs in the grower finisher stage has several advantages for feed manufacture, storage and delivery.
3. The LW range in this experiment was approximately 23 to 100 kilograms. Feeding a single diet over a different LW range and (or) under different feeding and management conditions might produce different results to those reported in the current study.