

An Evaluation of Starter Pig Growth Response and Utilization Economics When Highly Purified Protein and Lactose Sources of Varying Costs are Blended in Corn, Wheat, Naked Oat and Hull-less Waxy Barley Grain Bases.

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General Objectives:

1. To determine pig performance and interaction between protein/lactose source and grain bases in pig starter diets.
2. To identify economic considerations associated with using protein/lactose sources of varying cost on cost of production.

Brief Description:

Formulations of nutrient dense diets for early weaned pigs should stimulate pigs' feed intake and provide highly digestible amino acids in the proper proportions. Several studies have demonstrated that spray dried animal plasma is an effective protein source when used in the diets of early weaned pigs from 0 to 14 days post weaning. Previous research has shown that pigs can gain at very rapid rates with the right feeding programs. But the programs and ingredients used are expensive. The objective of this group of studies is to reduce the cost of phase 1 and 2 starter diets while keeping pigs gaining at a rapid rate, and to identify possible interactions between protein/lactose sources and North Dakota grown grain bases.

Status:

Feeding trials have been completed with corn, hull-less waxy barley and wheat grain bases. The trial to evaluate naked oat grain is in progress at this writing. Upon completion of the naked oat trial, a fifth experiment will be conducted to compare treatments of significance from within each grain base.

A final report will be completed spring 1998.

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