



CALIBRATING ENERGY TO OPTIMISE PIG FEED

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Project Participants

Australasian Pork Research Institute Ltd (APRIL, previously known as Pork CRC) and Aunir

Problem

Pig diets are formulated to suit a pig's nutritional requirements, which vary depending on the animals' age, sex, genetics and performance requirements. Digestible energy (DE) is an important consideration in the diet and affects the growth rate and reproductive performance of a pig. The undersupply or oversupply of energy in diets can result in increased costs due to reduced performance or feed inefficiencies respectively. Grains are the major ingredient in pig diets which contribute most of the dietary energy, but they are often expensive; one megajoule (MJ) of DE per kilogram can cost \$25 to \$30 per tonne of feed when grain prices are high. As such, it is important that Australian pork producers test their grains for available DE.

Project

Independent developers and suppliers of near-infrared spectroscopy (NIR) calibrations - Aunir - and APRIL/Pork CRC collaborated to provide producers with a database of in vivo energy calibrations for pigs. This database is known as AusScan Online, and contains energy calibrations for wheat, barley, sorghum and triticale.

Value for Producers

Aunir maintains and updates the calibrations to ensure they are relevant and accurate. By having access to them, nutritionists and feed mills can determine the DE values of grain stored on-farm for producers. This will enable them to accurately formulate rations aligned to pigs' nutrient requirements, reducing unnecessary costs and maximising performance. Energy testing can also help producers to confidently select and/or purchase the correct parcels of grains for diet formulation.



Recommendations

Producers can provide grain samples (a small ziplock bag filled with grain) to their nutritionists for energy analysis.

Nutritionists and feed mills can scan the sample using NIR technology and upload the spectra files from the machine onto AusScan Online. The calibrations are run over the internet and results are delivered via the website in seconds. AusScan's pig faecal DE calibration can predict the DE of cereal grains within a 0.26 MJ accuracy.

Nutritionists can also view previous results and data trends on the website. Nutritionists and producers only pay for the calibrations used.

More Information

Nutritionists and producers can visit the Aunir website for more information: www.aunir.com/products/ausscan-online

