

ALTERNATIVE FEEDS FOR PIGS – KNOWING THE RISKS

Alternative feeds, such as root and forage crops and some food industry co-products, become more attractive as the price of cereals and soya rise. When accuracy in the nutritional value of the pig's diet is not critical, and when alternative feeds are low in price at the point of use, there can be a cost benefit of using them. For this reason alternative feeds are more suited to established breeding stock and finishing pigs rather than newly weaned and young pigs.

Pigs are naturally capable of eating and digesting a mixed diet and can use a much wider variety of nutrient sources than we normally feed them. However, an awareness of the risks associated with using alternative feeds is important if pitfalls are to be avoided.

Information on the nutritive values of alternative feeds and guidelines on feeding practice can be found on the BPEX website (www.bpex.org.uk). This is the sort of information that is needed to formulate a balanced diet, however, variability is a key factor in the use of alternative feeds and this can shift the actual nutritional value of the final diet compared with formulated targets, which could affect animal performance.

Bear in mind the following issues associated with alternative feeds:

Comparisons need to determine total costs and net benefits

- Hidden costs
- Transportation of bulky and high moisture materials to farm
- Storage and handling on farm
- Keeping quality and losses in nutritional value during storage
- Delivery to point of consumption by pig
- Slurry management and slurry volume
- Variability in pig response
- Allow for higher gut fill from bulky feeds in comparing daily gain, FCR and killing out %

Alternative feeds differ from cereals and soya for good reason

- Supply can be unreliable due to volume and seasonality
- They are often bulky, have a high moisture content and are low in nutrient density
- The above properties involve appropriate handling, storage and feed delivery solutions compared with dry cereal based diets
- There may be a lack of knowledge over the nutritional value of some alternative



feeds and their nutrient content is more variable than documented values for commonly used dry feed ingredients

- Where book values on nutrient content are available, these may not represent the true composition of the material of interest. Naming of alternative feeds can be generic (eg silage) rather than specific (eg grass silage vs. maize silage)
- The above introduces an element of guesswork and risk in the formulation of balanced diets. In turn this may result in a loss of predictability in pig performance and productivity
- Some alternative feeds may transfer disease to both pigs and crops. For example rejected potatoes fed to outdoor pigs may introduce disease to land which is subsequently intended for potato production in a rotational system
- Some alternative feeds, such as green potatoes, may contain naturally occurring toxins, and in others, toxins develop during storage, for example through the growth of fungal organisms
- Some alternative feeds, such as raw potatoes, may contain naturally occurring inhibitors which disrupt protein digestion in the pig
- High fibre and low dry matter content and the presence of anti nutritive factors and toxins may affect appetite, digestibility and metabolism resulting in a loss of pig performance

Manage the risks through greater knowledge

- Consider the above issues and how you could address them
- Don't rely on guesswork. Obtain as much information as you can about the alternative feed before making any commitments. Ask the supplier, consult your nutritionist, and speak to your BPEX KT Manager
- Overcome uncertainty in the nutrient worth of the alternative feeding material by sampling and analysis. A small investment in laboratory analysis through your nutritional consultant will be rewarded in improved accuracy and nutritional balance of the final diet and predictability in pig performance and productivity. Sample and analyse frequently as there can be batch-to-batch differences in nutrient content
- Monitor pig performance and productivity continuously, don't leave things to chance

For more information and advice contact:

BPEX, PO Box 44, Winterhill House, Snowdon Drive, Milton Keynes MK6 1AX
telephone: 01908 844749 • email: kt@bpex.org.uk • website: www.bpex.org.uk

