

What is the practical impact of NWF protected feeds?

When nutrients are broken down in the rumen they produce gases which is a necessary, but also inefficient use of valuable nutrients.

As an animal's nutrient requirement increases, rumen bacteria alone are unable to cope with the increased requirements, therefore by-passing nutrients into the hind gut offers both additional nutrients but also less gas production and therefore a more efficient use of feed nutrients.

So why should I feed NWF protected feeds?

Three main reasons.

- 1. Improved performance** – UK diets based on grass silages and home grown cereals tend to be higher in rumen degradable nutrients. By-pass energy and protein is then required to supply the nutrients above and beyond what is capable from rumen bacteria. A lack of by-pass nutrients can often be seen in cows not achieving their peak yields.
- 2. Rumen available nutrients** – grass silages this season have been analysing very well. Oversupplying nutrients to the rumen can create a challenging environment for bacteria, therefore supplying by-pass nutrients is not only more efficient, but essential for rumen health.
- 3. Environmental responsibilities** – feeding excessive protein can be detrimental to both the cow's health (due to negative energy balance) and the environment due to higher urea nitrogen levels. Feeding by-pass protein can enable farmers to reach metabolizable protein requirements whilst feeding less overall crude protein and therefore reducing waste and cost.



What are my options?

Most usual protein sources such as rapeseed meal, distillers and soya contain both rumen degradable and by-pass protein. The same can also be said for starch, where cereals also contain both rumen degradable and by-pass starch. The key question is for every kilogram of a raw material that's fed, how many grams of by-pass protein supplied. This can be expressed as the amount of metabolizable protein from by-pass for MPB.

What are the NWF protected feeds and how do they become more by-pass?

NWF Agriculture has been manufacturing unique and high quality protected feeds for over 10 years under the 'Ultra' brand. The three products consist of Ultra Pro R (protected rapeseed meal), Ultra Soy (protected soya) and Ultra Starch W (protected wheat).

Using a protected treatment unique to NWF Agriculture in GB and widely used across Europe and the US and regularly tested to ensure their compliance with health and safety needs are met, the 'Ultra' brand of protected feeds offer a strong and consistent option for maximising performance both physically and financially.

Whilst offering the same amount of energy and starch as wheat, Ultra Starch W allows higher intakes to be achieved with a significantly reduced risk of causing acidosis. This is because more of the starch is protected and passed through to the hind gut. This benefits rumen health and nutrient utilisation. Where 24% of starch from wheat reaches the hind gut and 28% from caustic wheat, 42% of starch from Ultra Starch W passes through, offering strong competition to maize at 56% and of course maize offers a higher price.

The same principle is applied to Ultra Pro R and Ultra Soy where the approximate amount of by-pass protein in rapeseed meal is 30% but increase to 76% in Ultra Pro R, and soya at 39% by-pass is increased to 84% in Ultra Soy.

This offers both nutritional and financial benefits. By supplying more by-pass protein through Ultra Pro R and Ultra Soy, lower levels of overall protein can be fed which offers both animal health and environmental benefits.

Equally attractive is the cost benefits, using current market prices, supplying 1kg of by-pass protein using rape will cost £1.97/kg and soya £1.69/kg where using Ultra Pro R will cost £0.92/kg and Ultra Soy £0.89/kg.

Clearly utilising NWF Agriculture's unique offering of the 'Ultra' range can offer farmers both physical and financial benefits this season.



Adam Clay,
NWF Head of
Technical

To discuss your dairy herd rations ahead of this winter and the inclusion of Protected Feeds call **0800 756 2787**.

www.nwfagriculture.co.uk

