

Walking a fine line

'Yes' to cereals, but proceed with caution and ensure that rations are balanced

Producers will be tempted to up the amount of cereals included in their dairy rations this winter. But they must proceed with caution and make sure that the ration is fully balanced to avoid any nutritional problems and poor productivity.



Richard Wynn: "It's important to avoid potential acidosis issues"

The rate at which the price of cereals has fallen this winter has surprised many within the industry, but for dairy producers looking for a low-cost source of energy it represents a great opportunity. The absolutely crucial issue with increasing the use of cereals in dairy rations, however, is to ensure the necessary 'balancer feeds' are also incorporated cost-effectively. "Unless you get the balance right, then you're either going to run into problems with sub-acute rumen acidosis (SARA), have a shortage of protein, or spend more than you save buying other feed ingredients to feed alongside the cereals," explains KW nutritionist Richard Wynn. "It doesn't matter whether you're looking for that extra energy to counter this year's low-energy silages, boost production or keep condition on early lactation cows, the issues are the same."

With a record UK wheat harvest of around 17.5m tonnes, despite the poor

summer weather, there's an additional export surplus this year of some 4.5m tonnes, most of which is proving difficult to sell in the face of aggressive undercutting from Black Sea exporters. And there have been additional supplies of cereal entering the feed market this season due to the downgrading of many milling and malting crops, with low bushel weights and sprouting the main problems seen so far.

Acidosis issues

The implication is that there are huge volumes of wheat and barley still stored on-farm waiting to be sold, which means the likelihood of continuing good supplies of low-cost cereal throughout the winter.

"It's a very real opportunity to lower overall feed costs, but it's important to avoid potential acidosis issues," stresses Dr Wynn. "Introduce cereals gradually to the ration, mix in thoroughly, and aim for a little and often approach to feeding.

"Remember, rumen microbes need energy supplied as sugar, starch and digestible fibre to function efficiently, matched by sufficient rumen degradable protein to grow," he adds. "If you're processing cereals on-farm, rolling is better than aggressive grinding, as the starch is fermented more slowly in the rumen, leading to less chance of acidosis developing.

"And don't forget caustic-treatment of wheat; a 'safer' way of getting starch into the ration due to the buffering effect of

For TMR fed herd, it's important not to overcomplicate the ration



the caustic in the rumen, and the slower rate of fermentation. It can be bought-in very cost-effectively."

For herds fed a TMR, including the balancer feeds to accompany cereals is relatively straightforward, although it's important not to overcomplicate the ration. For non-TMR systems, using customised blends is probably the most practical and cost-effective way to increase cereal usage in a balanced way, and blends are also useful to simplify TMR feeding when feed ingredient numbers begin to rise.

Digestible fibre

But the first step has to be assessing whether there's sufficient structural fibre available to the cow, particularly where grass silages are wet and acidic. Where possible, include at least 0.5kg of chopped straw – preferably wheat straw – in order to create the necessary base within the rumen to accept potentially higher levels of cereal starch.

"You also need to make sure there's extra digestible fibre, particularly as cereal inclusion levels rise towards the upper limits of 34kg per cow per day," explains Dr Wynn. "Moist feeds like pressed sugar beet pulp and brewers' grains are highly palatable sources of digestible fibre which will also help overcome some of the intake issues with this year's forages. And sugar beet feed, soya hulls and wheat feed are all dry feed alternatives that are excellent for inclusion in high-cereal blends or TMRs. "Just keep a close watch on milk quality, as the starch in cereals will help boost milk protein but can depress milk fat. This gives an early indication that fibre levels may need increasing. And it may also be worth considering the inclusion of a rumen yeast or buffer such as Biosaf or Acidbuf, or the combination product BioBuff, to help keep rumen pH under control."

The other big issue to get right when feeding cereals is to ensure additional protein is added to the ration, ideally

mixed and fed with the cereals to maintain the energy:protein balance throughout the day. As Dr Wynn points out, rapeseed meal is good value at the moment, costing £100 per tonne less than hipro soyabean meal, particularly when supplemented with small amounts of high quality products like SoyPass and Prototec to raise by-pass protein intakes – vital for many rations this year due to forages having low rumen energy contents.

Non-starch energy

"The highly palatable Scottish distillers' maize and wheat pellets will also work well, having a protein quality – in terms of levels of digestible undegradable protein – on a par with that found in soyabean meal," he adds. "They also provide an easy way to supply additional protein without lowering the overall energy density of the ration, being high in non-starch energy."

It's going to be even more important than normal to get the right nutritional advice on how best to balance the diet and still keep feed costs under control. "There's very little point in saving money on energy by using low-cost cereals and then waste that advantage through lost production as a result of problems such as SARA or a poor choice of balancing ingredients."

Rachael Porter

