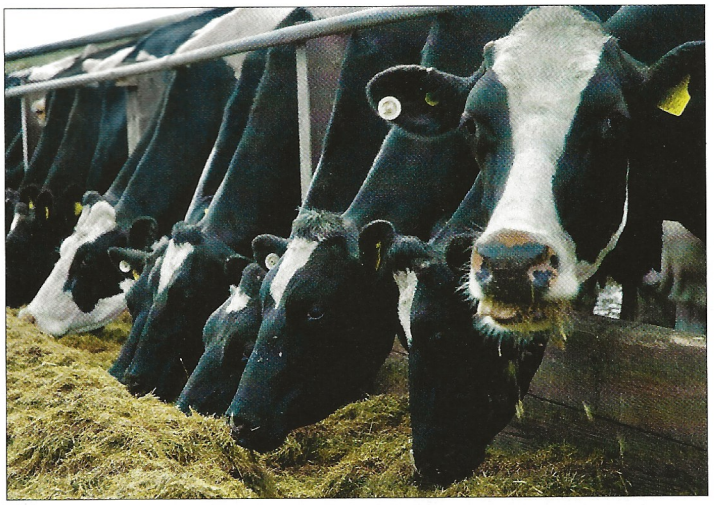
Fighting rising protein prices

Rising feed prices, particularly for protein sources such as soya and rapemeal, are having a big effect on dairy margins. The hit is poised to get larger as farmers move out of winter feed price contracts, warns Dr Phil Holder, managing director of molasses-blend specialist ED&F Man.

He stresses that just cutting protein levels or changing to lower grade proteins should not be an option, arguing that the value of lost production could have a bigger consequence than any saving in feed costs. Furthermore, it could have a knock-on effect for the rest of the lactation.

"The objective must be to ensure that the diet contains the optimum balance of rumen degradable and bypass protein sources to meet planned production levels," says Dr Holder. "One option is to replace a proportion of rape and soya in the diet with a protein-enriched molasses, which can be an excellent source of fermentable protein."



Reading dairy trials

In trials at the University of Reading, Centre for Dairy Research the effect of replacing a proportion of the rape and soya with Regumaize 44, a urea-enhanced molasses blend to mid-lactation cows was evaluated.

The original TMR diet contained maize and grass silage, wheat, sugar beet and 4kg/day of a 50:50 rape: soya mix. In the trial diet, 1.6kg of rape and soya was replaced with 2kg of Regumaize, reducing the rape: soya by 40% but leaving the total dry matter fed the same. The diets had the same energy and protein contents.

The change in the diets had no impact on milk yield and butterfat but milk protein was increased—from 3.62% to 3.71%—possibly due to the extra readily fermentable energy in the molasses.

Potential cost savings

"The significant point is that, at today's prices, the diet including Regumaize would be 16p/cow cheaper—or nearly £1,000/month for a 200-cow herd. For farmers on a constituent-based contract, the additional milk protein would help support milk prices too.

"It is important to emphasise that we would never advocate a total switch to a molasses blend as this would compromise the total protein balance in the diet," Dr Holder stresses. "But a partial replacement could go quite a way to reducing the impact of rising prices."

Dr Holder suggests that where a farm has good cover of protein straights purchased at lower prices, a molasses blend could be successfully included to make those stocks last longer—delaying the time when more expensive supplies need to be purchased.

"Alternatively, if a farmer is about to order more soya and rape, revising the ration to include some Regumaize will reduce the impact of higher feed prices on margins.

"But, before making any change, it is vital to have the ration checked by a nutritionist. They will determine the most effective replacement rate to ensure that the protein sources are balanced to enable cows to produce to their potential and allow lower feed costs to work through to margins," he advises.

Cereal alkalisation option

Dairy farmers looking for cost-effective sources of feed protein could consider alkalisation of straight cereals, suggests Rob Smith from FiveF Alka.

"Dairy units should always be looking to reduce their reliance on expensive bought-in protein—to both improve enterprise sustainability and cut winter feed costs. And alkalisation of homegrown or bought-in cereals offers milk producers a highly valuable solution," he says.

"Soya bean prices have jumped by £50 per tonne over the last two months and we are getting a lot of calls from farmers worried about the forward cost of bought-in protein balancers," he says. "So it makes absolute sense to extract as much protein as you can from what you can grow practically on your own farm.

"For example, if you grow a decent wheat crop—as most UK farms can—the grain yield will typically be 4t/acre containing 12% protein. But through alkalisation you can increase this crop's protein level by 1.46 percentage units for every 10kg of Home n' Dry mixed in per tonne. This means that, at the standard inclusion rate of 30kg Home n' Dry per tonne of cereal, you will end up with Alkagrain containing more than 16% protein."

Mr Smith explains that with alkalisation you are adding some highly cost-effective concentrated protein (via Home n' Dry pellets) to conserve and enhance the grain during storage. "What's more, you can treat stored cereals in this way all year round and even increase the Home n' Dry inclusion rate to boost protein yield still further.

"Once in contact with moisture, the pellets quickly release ammonia into the grain. As well as having an increased protein content, the resultant feed is alkaline. It is also resistant to vermin while being stored on farm. Alkalisation allows dairy farmers to feed more cereal in the ration without triggering acidosis too.

"Essentially, this is a dual cash benefit and some farmers are even able to double or triple the standard cereal inclusion rate and still deliver the final feed protein level that they require—all without causing any problems for the cow," maintains Mr Smith.