

Enzyme from germinating seeds is being harvested for incorporation into a feed supplement to help the cow extract more of the nutrients from her diet, and which in turn could boost yields by up to two litres a day.

Ben Helm from AB Neo, part of the giant AB Agri group, said: "We harvest a blend that is high in starch and fibre enzymes, particularly amylase."

He said their new product Optipartum C+ now contains twice the amylase of its predecessor and, when added to a cow's ration, boosted the utilisation of her diet.

Ration

Mr Helm declared: "We are not interested in changing what the nutritionist has advised, we are just saying put this on top of the ration to make the cow more efficient in her use of what you have already agreed to feed her."

He has already tried the new product on 12 UK farms and asked them to feed Optipartum C+ for 30 days and see what happens.

Mr Helm said: "We have seen some absolutely fascinating things. First of all, within seven-10 days the producer sees a change in the cow's dung. It goes thinner and creamier, because the enzymes are working on the cow's digestion."

He said that if a producer is feeding 19% starch in his ration,



Supplement boost to feed efficiency

cows are routinely excreting 4% starch on a dry matter basis in their dung.

"By using this product on one farm we dropped that starch excretion by 46%, so the cow was getting more from her ration."

Following the change in dung consistency, it was not until three weeks later the milk response started to kick in.

Mr Helm said in that example the cow gave an extra two litres of milk a day as a result of the supplement.

As to cost, the supplement is available on-farm where the producer puts 200g/head/day into the mixer wagon costing 15p/day, and there is also a concentrated version which goes to the blending plant which is fed at 40g/head/day and costs 12p/cow/day.

But Mr Helm warned the product could only work when the levels of starch in the diet were above 16% starch in the DM, and because of this, it did not work on two of the trial farms which were

feeding 15% starch and below.

He said: "That is because if cows were 75-80% efficient, you have less starch to work on with 15% starch, whereas if you were adding 25% starch, you have much more to work on."

He said the product was particularly suited to the south of the country where the bulk of the maize is grown.

"I guess you will not find a diet below 16% starch in the South, whereas in the North you will."