

## Ketosis in Cows

### Why propylene glycol is used

Glycerine and propylene glycol supply highly effective extra energy which can be utilised in a period of negative energy balance after cows have freshly calved. The extra energy supports the liver and promotes rapid lactation requirements without the cows going into ketosis.

### Ketosis and its implications

Ketosis is a worsening problem in UK dairy cattle, with approximately 30% having 'hidden ketosis'. It is commonly characterized by anorexia, depression and reduced productivity, lower milk yields and poorer fertility. Even when at sub clinical level, cows are at higher risk of suffering a wide range of metabolic and reproductive issues which can further reduce income and add extra cost such as extended calving intervals. The direct costs of ketosis include the input by the vet and herdsman, drugs, discarded milk and reduced yield.

Typically, cows will lose 0.5 in body condition score from calving to service but many lose more than that. Fat cows already have lower dry matter intakes post calving and so their body condition score drops even more, taking them to the point of ketosis.

Cows that have been dry for a long period of time or cows that have some sort of metabolic issues during calving are also more susceptible to ketosis.

### Propylene glycol and more

Farm-O-San Pro-Keto is supplementary dietetic feed developed to support high yielding dairy cows. It includes all the essential ingredients required for a good start to lactation and the maintenance of healthy liver function while reducing the risk of ketosis.

The energy sources in Pro-Keto help cows increase energy intake rapidly and are immediately available, needing no processing by the liver, unlike many other energy supplements. At the same time, the added minerals and vitamins improve the overall efficiency of energy and fat metabolism helping the cow to make full use of other energy sources in the diet.



**Reduce the risk  
of ketosis in  
dairy cows**

**Pro-Keto Dry**

Dietetic complementary feed for high performing dairy cows

## Dietetic complementary feed for cattle

### Pro-Keto (reduce risk of ketosis)

Ingredients	Advantage	Benefit
Propylene-glycol	Glucose supply	Sustainable energy and higher margins
Vitamin E & Zinc	Immunity	Increases immunity, appetite and feed efficiencies
Vitamin B12 & Niacine	Energy	Increased metabolism of feed. Therefore feed efficiencies
Choline	Fat digestion and methyl cycle	Increases metabolism
Selenium	Fertility	Supports immunity
Practical application	Dry and liquid	Versatile for any system / palatability

### Recommendation

	Liquid Version	Dry Powdered Version
Prevention	2x day at 100-125 ml for last 3 weeks of the dry period and first 3 weeks of lactation	250g/day/animal for the last 3 weeks of the dry period and the first 3 weeks of lactation
Acute case of acetonemia	2x day at 250ml for first 2 – 3 weeks of lactation	N/A



If you have any queries please contact Roxanne Winstanley on 07767 482383 or Samantha Allan on 07801 568586 or email:

[farm-o-san.gb@trouwnutrition.com](mailto:farm-o-san.gb@trouwnutrition.com)