

Tackling grass staggers (hypomagnesaemia) in suckler cows

Debby Brown, Vet and nutritionist, Advanced Ruminant Nutrition

Debby has been working with a producer in County Durham to tackle the issue of mineral nutrition of suckler cows at grass. The main issue has been the number of cows being found dead in the autumn out at grass, with other cows also down but not recovering. Magnesium buckets were put out but not always soon enough and some cows weren't using them.



What is hypomagnesaemia?

Hypomagnesaemia is also known as grass staggers, and is caused by a lack of magnesium in the diet. It is often associated with lush spring or autumn grass which has a rapid passage rate, which results in reduced nutrient absorption. It can occur in stormy weather when cows are stressed. The problem can also be associated with high levels of potassium (e.g. when applied as a fertiliser to grazing land) which can disrupt magnesium absorption. A similar effect can be seen from ammonium fertiliser.

Cattle are not able to store magnesium in their body so need to consume their requirement each day. There are numerous options to supplement magnesium:

1. Magnesium boluses
2. High magnesium licks
3. Magnesium salts can be added to drinking troughs
4. Extra forage at grass such as hay, straw or silage
5. Cal-Mag molasses solution in buckets in field
6. Feed high magnesium nuts
7. Dust pasture with Cal-Mag at periods of high risk

The solution

On this farm the decision was taken to offer hay to the autumn calving cows earlier in the season to reduce the impact of a grass flush often seen around September. Magnesium buckets were also made available throughout the whole grazing season to encourage the cows to use them more. In spring, cows were also turned out with big bale silage available so there was not a sudden change in diet and the passage rate was slowed down to improve nutrient absorption.

These changes in management have resulted in no losses this year from grass staggers, which is a great improvement. Should the problem recur then magnesium boluses may be considered. It is important to remember that when individual cases present, it is likely that the whole herd are deficient in magnesium and blood samples should be taken to check

levels in a number of cows. If supplementation is required than boluses could be administered to the cows two to three days prior to the expected period of risk. They release magnesium continuously in either the reticulum or rumen and more boluses can be given after four weeks if necessary.

Debby would always recommend a full mineral analysis of the farm, including water, forage and other inputs, and assessing potential deficiencies and toxicities to ensure mineral balances and requirements are met on farm.