

VET'S VIEW

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Be watching for grass tetany, especially with older cows

Spring brings the return of robins and flowers to Iowa. For cattle producers, it also is filled with new born calves and the greening of pastures. The downside for cattle is lactating cows and new growth grass can lead to grass tetany.

Grass tetany or 'grass staggers' is a common ailment of mature lactating cows in the spring.

Grass tetany is the result of low magnesium in the cow. Magnesium is essential for transmission of nerve impulses and muscle contraction. Unlike hypocalcemia (milk fever), which causes a flaccid paralysis, hypomagnesaemia (grass tetany) leads to a paralysis along with paddling and rigidity.

If treated in time, cows will usually recover. Close observation can identify signs of hypomagnesaemia prior to paralysis. Cows will show progressive signs such as restlessness, irritability, muscle twitching, incoordination, staggering and collapse.

Once down, cows will paddle and thrash with their head arched over their back. If not treated, cows will become comatose and die.

Be careful handling these animals as excessive stress can cause death and the low blood magnesium causes a change in behavior that can cause animals to be very aggressive.

Older cows are generally more susceptible to grass tetany because they cannot mobilize bone stores of magnesium (Mg) as readily as younger females. Typically cows in the first two months of lactation are most at risk as lactation begins. Lactating cows have an increased magnesium requirement because milk production requires a high amount of magnesium.

New growing grass is usually associated with grass tetany because lush grass in the spring has a lower magnesium content than at other times. When grass is growing fast and the soil is cool, potassium is taken up by plants more readily than magnesium, which leads to low magnesium content in forages.

However, signs of hypomagnesaemia can also be seen when cows are not grazing lush pasture, but in a dry lot. Since cows have a daily requirement for magnesium during early lactation, cows that go off feed can show evidence of hypomagnesaemia even though they are not grazing lush grass.

If turn out can be delayed until grass is at least six inches tall, the risk for grass tetany is greatly reduced.

Additionally, incorporation of legumes in the pasture will increase the magnesium content of the forage in the diet. In the short term, prevention of grass tetany can be accomplished by supplementing magnesium in the diet.

Initiate magnesium supplement at least two weeks prior to turn out on lush grass. High magnesium mineral is not always palatable, so reliance on free choice minerals intake may not be adequate. Talk to your extension specialist, veterinarian or nutritionist on the best way meet your cows magnesium requirements this spring.

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