



Avoiding Grass Tetany in Your Cattle Herd

By Jackie Nix

What is Grass Tetany?

Grass tetany or grass staggers (also known as hypomagnesaemia or magnesium tetany) is a metabolic disturbance associated with magnesium deficiency in cattle grazing young, rapidly growing forages. This is most prevalent in cool season grasses or winter annuals in winter and early spring under lush growing conditions. Grass tetany is most common in cows in early stages of lactation and often affects the heaviest milkers since magnesium is a milk component. Mature cattle are far more susceptible to grass tetany than younger ones, however tetany has been seen in younger animals in a few cases.

What Causes Grass Tetany?

Grass tetany results from animals grazing plants with low magnesium content. This can result from naturally low levels of magnesium in the soil or external factors, which serve to make magnesium unavailable. Pastures heavily fertilized with high levels of nitrogen or pastures with high soil potassium are most likely to produce tetany, but tetany will occur under other conditions too. One such condition is wet soils. Water logged soils, which will be low in oxygen, prevent plants from taking up sufficient magnesium regardless of soil magnesium levels. Forages heavily fertilized with animal wastes also have a high probability of causing tetany.

Symptoms of Grass Tetany

The first sign of grass tetany will commonly be a dead cow that appeared healthy the last time she was checked. Early signs of grass tetany include; nervousness, staring eyes, uncoordinated gate, grinding teeth, erect ears, and elevated respiration and heart rate. As the condition worsens, animals become extremely sensitive to sounds. This is followed by the onset of muscle tremors, leading to convulsions and then death.

Treatment of Grass Tetany

When symptoms are observed, intravenous injection of calcium magnesium gluconate or a magnesium enema is most commonly recommended. A veterinarian should do these treatments because toxic reactions can occur.. Animals in early tetany stages should be handled carefully to avoid creating additional stress. When tetany symptoms occur, take one or more of the following steps as soon as possible:

1. Get immediate treatment for affected animals as previously described.
2. Get supplemental magnesium into all animals in the herd as soon as possible.
3. Move the herd to more mature pastures or pastures containing legumes or move to a location where they can be fed hay, preferably legume hay.

Prevention of Grass Tetany

As they say, an ounce of prevention is worth a pound of cure. The best method for dealing with grass tetany is to prevent its occurrence. If your pastures are deficient in magnesium, you can lime with magnesium (dolomitic) limestone. Unfortunately, magnesium fertilization will not always prevent tetany because grasses cannot take up magnesium in wet soils. Therefore, a nutritional supplement high in calcium and magnesium can reduce the risk of grass tetany.

Use of Magnesium-Fortified Supplements

Magnesium-fortified mineral supplements are the best defense against grass tetany. However, magnesium is not naturally palatable to cattle and in order for supplementation to be effective, magnesium needs to be supplied on a

daily basis. Unfortunately, some high-magnesium mineral supplements don't provide consistent enough consumption to provide daily intake of magnesium and thus prevent tetany in a herd of animals. Fortunately, Sweetlix has excellent high-magnesium cattle supplements available that are highly palatable and will provide consistent daily consumption of needed magnesium.

Sweetlix® CopperHead® Hi Mag with RainBloc®

Specially designed high magnesium supplement for cattle in copper deficient areas or grazing fescue pastures. Delivers enhanced levels of copper and other trace minerals as well as high levels of magnesium. Sweetlix® CopperHead® Hi Mag with RainBloc® is highly palatable to ensure proper and consistent consumption of necessary magnesium. Contains added RainBloc® for improved resistance to moisture.

Sweetlix® Mol-Mag Pressed Blocks

The Sweetlix® Mol-Mag Pressed Block is a balanced, highly palatable source of minerals and vitamins especially designed to provide 19 g¹ of magnesium to prevent the symptoms of grass tetany. Sweetlix auto-regulated block technology eliminates the problems of over-consumption and waste but still assures that the needed amount of magnesium will be consumed. Cattle lick the block a few times and then leave, but return throughout the day. The molasses in the Sweetlix® Mol-Mag Molasses Pressed Block not only assures consistent consumption, but also creates a weather resistant block that will remain palatable in all weather conditions. No special feeders or shelters are required.

Sweetlix® 14:1:14 High Mag Mineral and Vitamin supplement

The Sweetlix® 14:1:14 High Mag Mineral and Vitamin supplement provides 15 g¹ of magnesium per day. Because magnesium sources are naturally unpalatable, this mineral contains dried molasses and salt to ensure palatability and consistent consumption. Sweetlix® 14:1:14 High Mag Mineral and Vitamin supplement also provides a high level of calcium, which is essential for milk production as well as bone and muscle growth; copper, zinc and selenium needed for immunity and reproduction and vitamins A, D & E, also important for immunity and growth

For more information about any of the mineral supplements listed above and how they can be used to prevent grass tetany in your cow herd, call a technical specialist at Sweetlix® at **1-800-325-1486** or visit the Sweetlix® homepage at www.sweetlix.com.

¹Individual consumption may vary according to previous mineral nutritional status, animal size, production status, and supplement availability.

Jackie Nix is a nutritionist with Sweetlix® (www.sweetlix.com). You can contact her at jnix@sweetlix.com or 1-800-325-1486 for questions or to learn more about the Sweetlix® line of mineral and protein supplements for cattle, horses, goats, sheep and wildlife.

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