

GRASS TETANY IN BEEF CATTLE

Warren Gill, Professor
Extension Animal Science - Beef, Sheep and Horse

Grass tetany is a serious, usually fatal metabolic disease of cattle. It most commonly occurs in mature, nursing cows. Often one or more of the better cows in the herd are found dead or in serious distress. Warm, wet weather and rapid grass growth often leads to grass tetany. Late winter and early spring months are the most common times for grass tetany in the beef cow-calf herd, but fall tetany is certainly possible.

The best time to take preventative measures is in advance of the "danger." The most common measure is to feed a mineral that is high in magnesium. Most feed companies sell high-magnesium mineral supplements and commercial mixtures that are acceptable.

Grass tetany prevention steps include:

! In herds with a history of grass tetany, it is recommended that cows be provided at least 1 oz. per day of magnesium oxide to yield at least 0.6 oz. of magnesium.

! Make certain the form of magnesium in your supplement is either magnesium oxide or magnesium sulfate (not magnesite or dolomitic limestone).

! In general, loose mixtures are preferred in situations where there is a history of grass tetany in the cattle herd, while blocks may be "OK" in low-risk situations where there has been little problem in the past.

! Do not stop feeding hay too soon. Keep hay available until cattle completely stop consuming it. Use the highest-quality hay available for lactating cows.

! Provide grain supplementation. A supplement containing a high percentage of cereal grains will provide the energy that cattle need to overcome energy deficits. Three to six pounds

of concentrate supplement may prevent grass tetany and could help cows regain body condition necessary for successful rebreeding.

! After starting cattle on high-magnesium supplements, continue until "danger" is past. This is generally in late spring.

! Most producers use commercially prepared mixtures because the entire mineral profile is critical during the rebreeding period and commercial supplements are more likely to provide this. Often producers may prefer to mix their own. Extension agents have recipes for making home mixtures that are high in magnesium.

To prevent grass tetany, it is desirable to have magnesium intake at about 0.6 oz. per day. Part of this may come from forages or other feeds, but in serious tetany situations, it may be desirable to obtain most or all of this level from the mineral. To check the amount of magnesium obtained from the mix, use the chart below.

Mg% in Supplement	Consumption per Day (oz.)	Magnesium Intake (oz.)*
4	2	.08
4	4	.16
8	2	.16
8	4	.32
12	2	.24
12	4	.48
16	2	.32
16	4	.64

*This is calculated by multiplying consumption X % Mg in mix (2 oz. x 4%/100 = .08).

Additional information on beef cattle nutrition can be obtained by contacting your local Agricultural Extension Service office or from the Extension-Beef, Sheep & Horse home page: www.utextension.utk.edu/ansci