

Overcoming Grass Tetany

Grass tetany is a problem observed in beef cows grazing lush spring forages. Grass tetany, or grass staggers, as it is sometimes called, is a metabolic condition that occurs where inadequate magnesium (Mg) is available to the cells of a cow. Lush forages are actually high in Mg content, but the lush forage is also high in potassium (K) and soluble protein which complex with Mg and render it unabsorbable from the gut. When Mg is not available for absorption, muscle contractions become erratic, uncontrollable, and subsequently, the cow loses muscle control and cannot walk. If Mg is not administered immediately, she can die.

High Mg free choice minerals are offered to overcome the high K and soluble protein, which tie up the Mg in the gut. Unfortunately, magnesium oxide and other inorganic sources of Mg are unpalatable; thus consumption of free choice minerals can be low. High Mag free-choice minerals should contain 14 to 15% Mg, 5 to 7% phosphorus, and added flavors to promote consumption. Consumption of 6 to 8 ounces is needed to provide adequate Mg with lush pastures. Force-feeding Mg in cubed and pelleted supplements and grain mixes insures Mg consumption, if this can be an option.

Typically, breeding season is approaching and adequate levels of P, Zn, Cu, Mn, Se, and Vitamin E are critical to permit the uterus to heal and allow for fertile estrus cycles. Poorly fortified and unpalatable high Mg minerals can translate into poor conception rates and open cows.

High Mg minerals are offered from 2 to 4 weeks before initiation of spring pasture growth and until the boot stage of forage maturity, which could be 6 to 8 weeks total. The mineral is offered 2 to 4 weeks early to allow the cow to adapt to its taste and to help assure consistent consumption by the time spring pasture emerges.

A well-fortified pasture free-choice mineral containing 9 to 12% P and 2.5 to 5% Mg should replace the High Mag mineral once the grass matures to the boot stage.