



## Grass Tetany and Million-Dollar Moisture

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It appears that spring might finally have arrived in Montana! While some portions of the state remain in a drought, much-needed spring moisture has been received in southeastern Montana. It looks like we may grow some grass, and grass tetany is probably a timely topic.

Grass tetany is a metabolic disease of cattle that is usually associated with grazing lush, green pasture. The condition is caused by low blood concentrations of magnesium. Magnesium is a required mineral for cattle, and when pastures are growing rapidly in the spring, grass may not contain adequate amounts of magnesium to meet requirements. High potassium and crude protein contents of rapidly growing forage complicate the grass tetany issue, because potassium and ammonia (a product of crude protein breakdown) interfere with the absorption of magnesium from the rumen. Magnesium requirements increase during lactation, so lactating cows have increased risk of developing grass tetany, and the risk increases as milk production increases. Low calcium intake combined with inadequate magnesium intake can result in more severe cases of grass tetany. Stress, storms, or other conditions that result in cattle being off-

feed for 24 to 48 hours may decrease blood magnesium levels and cause grass tetany in several cows in a herd at one time.

Signs of grass tetany could include finding dead cattle with evidence they may have struggled. Symptoms in live cattle could include convulsions, weakness, disorientation, or aggressive behavior. Testing for grass tetany can be accomplished by collecting a blood sample in live animals, although care must be taken. Life-threatening convulsions can be caused by simply running the animals through the chute to collect a sample. Blood concentrations of magnesium return to normal after death, but magnesium concentrations of fluid from the eye or cerebrospinal fluid do not change near death and are good sources for testing for grass tetany in animals found dead.

Prevention of grass tetany is the key to successfully managing this condition. Achieving increased calcium and magnesium consumption through supplementation is the main goal. Daily intake of magnesium is important, as grass tetany can occur within 48 hours when blood magnesium concentrations are too low. This can be accomplished in several ways, from salt-mineral mixes to molasses-based lick tubs, all of which are available in "high-mag" formulations at your local feed store. Supplying additional magnesium during the early growing season can help your operation avoid losses from grass tetany.

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[www.mtbeefnetwork.org/](http://www.mtbeefnetwork.org/)

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**Cattle Buyers Summit,  
Holiday Inn Grand  
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No registration fee.  
Call Mo at 994-4323 for  
more information**

**Cattle Buyers Summit Agenda**

May 14 – Early Arrivals Reception

6:30-7:30 – BVD-PI Screening Programs –  
Dr. Bruce

Hoffman, DVM, Animal Profiling  
International, Manhattan, MT

May 15 – Agenda

8:00 – Registration

8:30 – BQA Strategic Plan / New  
Initiatives

9:00 – Beef Checkoff Overview

9:15 – The Cattle Supply Chain

10:00 – Break

10:30 – Managing the #@\*%& Paperwork

11:00 – 2005 & 2007 Beef Quality Audits

Noon-1:15 – Lunch / Market Outlook

1:15 – Value of Beef Verification  
Programs

2:00 – Round Table Breakouts

3:00 – Round-Table Reports

4:00 – Adjourn

**Speakers:**

– Clint Peck, Montana State University

– Charlene Rich, Montana Beef Council

– Jim Warren, 101 Livestock, Aromas, CA

– Kristen Larson, Prewitt & Co., Sidney,  
MT

– Dr. Gary Smith, Colorado State  
University

– Jim Robb, Livestock Marketing  
Information Center, Lakewood, CO

– Andy Kellom, Verified Beef, Bozeman,  
MT

– Dr. John Paterson, Montana State  
University

– Dr. Eric Moore, DVM, Schering-Plough  
Animal Health