

# *Review of Metabolic Disorders*

AG 240

Winter 2005

# Anemia



- Cause
  - Low Iron, copper, cobalt, folic acid, riboflavin or B6
- Symptoms
  - Loss of appetite and listlessness
  - Pale membranes around eyes and mouth

# *Feedlot bloat*



- Cause
  - High concentration rations increases slime producing bacteria in rumen
    - Slime traps gasses

# *Pasture bloat*

- Cause
  - High legume pastures produce more foam
    - Heavy foam traps gasses



# *Lactic Acidosis*



- Cause:
  - Increase grain in ration too fast or by too much
- Symptoms:
  - Poor performance, founder (laminitis), rumen function quits, death



# *Colic*

- Cause
  - Internal parasites, blockage, twisted gut
- Symptoms
  - Abdominal pain
- Best prevention is parasite control and proper feed and watering

# *Enterotoxemia* *(over-eating disease)*



- Cause
  - Toxin produced by clostridium perfringens bacteria that grow when fed high energy feeds or lush pastures
- Symptoms
  - Sudden death
  - Can be prevented by vaccination

# *Founder (laminitis)*



- Cause
  - Overeating grain, digestive disturbances, lush pasture

# *Founder (laminitis)*

- Symptoms
  - Extreme pain, reluctance to move, excessive hoof/toe growth



# *Grass Tetany (grass staggers)*



- Cause
  - Low blood Mg and in many cases low blood Ca
  - Cattle grazing on lush grass pastures in latter stages of gestation or early lactation

# *Grass Tetany (grass staggers)*

- Symptoms
  - Nervousness, staggering, convulsions, coma and death



# *Ketosis*



- Cause
  - CHO- low blood sugar
  - High energy demand pulls down fat reserves rapidly
- Symptoms
  - Loss of appetite, acetone (sweetish chloroform-like smell) odor from milk, urine and breath

# *Liver Abscesses*



- Cause
  - High concentrate rations
- Symptoms
  - Symptoms include reduced feed intake and gain
  - Can be prevented with antibiotics

# *Parakeratosis in swine*



- Cause
  - Zn deficiency and excess Ca in ration or deficiency of essential fatty acids
- Symptoms
  - Elephant-hide appearance to the skin of feeder pigs

# *Parturient Paresis*

## *milk fever, hypocalcemia*



- Cause
  - Low blood Calcium
  - Usually occurs within 72 hours following parturition
  - Ewes in the latter stages of gestation
- Symptoms
  - Loss of appetite, nervousness, collapse, head turned back toward flank

# *Pregnancy disease of ewes*



- Cause
  - Ewes carrying twins or triplets in the last 6 weeks of gestation
  - Insufficient CHO - low blood sugar
- Symptoms
  - Ketosis in sheep

# *Night Blindness*




- Cause
  - Vitamin A deficiency
- Symptoms
  - Roughened hair and scaly skin with mild deficiency
  - Prolonged deficiency leads to poor vision in dim light and eye ulceration

# *Nitrate poisoning*



- Cause
  - Excessive levels of nitrate plant material
- Symptoms
  - Bluish coloration of membranes, staggering, shortness of breath and death

# *Pine Needle Abortion*

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- Cause
    - Pregnant cattle consuming ponderosa pine needles
  - Symptoms
    - Abortion of pregnant cows or birth of weak calves

# *Prussic Acid Poisoning*



- Cause
  - Excessive levels of prussic acid
    - Primarily in sorghum family
- Symptoms
  - Foaming at mouth, rapid respiration rate, staggering, spasms and sudden death

# *Urea toxicity*



- Cause
  - Consumption of excessively large levels of urea (NPN)
- Symptoms
  - Nervousness, excess salivation, muscle tremors, respiratory difficulty and tetanic spasms

# *White muscle disease*



- Cause
  - Nutritional muscular dystrophy
  - Se and Vitamin E
- Symptoms
  - Called “polymyositis” in foals