

# Ruminal Acidosis

## Causes:

- Consumption of acidic feeds like silage
- Failure to produce sufficient quantities of natural buffers in the saliva eg. low fibre diet
- The production of excessive amounts of normal rumen acids
- Pastures low in effective fibre eg lush spring grass
- Supplementation of these pastures with silage and starchy concentrates eg. cereal grains, pellets, potato waste

## Clinical signs (depend on the severity of the acidosis):

- Sub-clinical acidosis
  - Decreased milk fat percentage and milk production
  - Decreased appetite
  - Liver abscesses
  - Laminitis resulting in lameness
  - Diarrhoea
- Clinical acidosis
  - Mild
    - Dehydration (sunken eyes)
    - Loss of appetite
    - Diarrhoea
  - Severe
    - Downer cows
    - Coma
    - Death
    - These cows also have concurrent low blood calcium levels.

## Prevention:

- Feeding a balanced diet
- Avoiding sudden feed changes
- Introducing starchy feeds slowly
- Consider using feed additives such as sodium bicarbonate, calcium carbonate, rumensin, eskalin and causmag especially if feeding more than 5kg of concentrates per day.

## Treatments:

- Removal from concentrate feed and provision of good quality hay.
- Drenching with Sykes drench if not already scoured
- Administration of milk fever treatment **under the skin and not into the vein**
- Drenching with 500 grams of both sodium bicarbonate and magnesium oxide in 8 litres of water - ensure that the cow is swallowing
- If the cow is down with severe dehydration, intravenous treatment by a veterinarian is required