

## ACIDOSIS (grain overload, founder)

- DISEASE OF FEEDER LAMBS
- Mostly lambs coming from range weaning and being placed on concentrated diets
- Should change from 15% concentrate to 85% concentrate over 14-21 days

### Cause

- the consumption of an excess amount of concentrates either by accident or during adjustment periods to high concentrate diets
- concentrates are fermented by the rumen micro-flora, which produces acids
- usually lambs have time to adjust to the acidity, but if change is too sudden the bacteria produce high levels of acid, which kills the micro-flora and damages the rumen lining
- the acid is absorbed into the system and disrupts the acid-base balance
- if animal does survive, there may be permanent damage to rumen wall and abscesses on the liver

### Symptoms

- occurs within 6-12 hours after consumption
- first sign is depression, with ears and head lowered, and abdominal discomfort
- the lamb becomes recumbent and unable to rise
- as it progresses, the lamb becomes comatose and dies
- entire process could take as little as 24 hours
- if lamb survives, bumping of the rumen may produce splashing sounds due to fluid build up
- examination of the mucous membranes of the eye show a congestion of blood vessels

### Diagnosis

- watch and keep records of sudden changes in feed and consumption along with the symptoms
- the diagnosis can be confirmed by necropsy of dead lambs, examining the rumen, and acid pH tests

### Treatment

- early treatment is essential for recovery
- any lambs showing symptoms should be drenched with antacids
  - carmalax
  - bicarbonate of soda
  - magnesium hydroxide
- give 10cc of penicillin mixed in with drench
- for valuable animals, give 500ml of electrolytes (lactated ringers) or bicarbonate of soda intravenously
- for extremely valuable breeding animals, rumen can be pumped
- drench with 60-100 ml mineral oil
- give tetracyclines (oral or injectable) for 1 week

**Prevention**

- careful management of concentrate intake
- adequate bunk space
- separate lambs that do not appear to be doing well
- put electrolytes in water
- mix bicarbonate with feed during adjustment periods
- be sure lambs can not get into feed room

Sources: SID Handbook & Journal of Animal Science