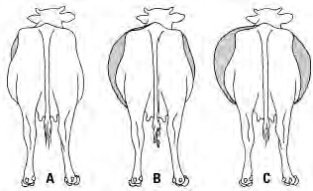


BLOAT

BLOAT



bloat

- frothy bloat (primary)
- free gas bloat (secondary)
 - failure to eructate
 - injury?
 - hypocalcaemia



incidence

- common in dairy cows
- rarely in sheep
- abomasal bloat in lambs

aetiology

- **plant factors**
 - rapidly grown clover (alfalfa worst) & grass
 - low tannin levels
- **animal factors**
 - ruminal microflora
 - salivary composition & volume
- **environmental factors**
 - warm wet weather

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pathophysiology

- rapid fermentation of clover
- proteins form stable foam
- animal unable to eructate
- ruminal distension
- dyspnoea, reduced cardiac output
- death

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treatment

- **in emergency**
 - pass stomach tube
 - insert large cannula
 - rumenotomy



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treatment

- oils
- detergents
- household remedies for first aid

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OILS

- edible oils
 - may flavour milk
 - softer milk fat
- liquid paraffin
 - absorbs fat soluble vitamins
- oils are not very effective for treatment



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detergents

- non-ionic surfactants
 - polyethoxylated alcohols
 - poloxalene
- ionic detergents
 - toxic
 - rarely used
 - dioctyl sodium sulphosuccinate



side effects

- diarrhoea
- excitation

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first aid

- milk 1L
- cream 250mL
- vegetable oil 100 – 500mL
- spirits ?



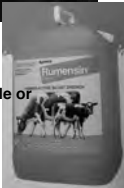
prevention

- avoid dangerous pastures
- feed hay before turning cows out
- spray pastures with oils
- detergents in drinking water
- drench daily with polyethoxylated alcohol
- drench at milking with oils
- paint detergents on cows
- antibiotics
- breed bloat resistant cattle

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antibiotics

- Monensin (Rumensin)
 - ionophore antibiotic
 - alters ruminal flora
 - takes several days to work
 - available as a slow release capsule or drench
 - kills horses and dogs



antibiotics

- grain fed cattle
 - may be free gas or frothy bloat
 - wide variety of “production enhancer” antibiotics used
 - most kill Lactobacilli

What would you do?



bloat

- prevention is better than cure
- in emergency relieve ruminal tympany
 - try stomach tube first
- treatment – polyethoxylated alcohols (PA)- check rest of herd
- prevention – good husbandry, PAs or monensin