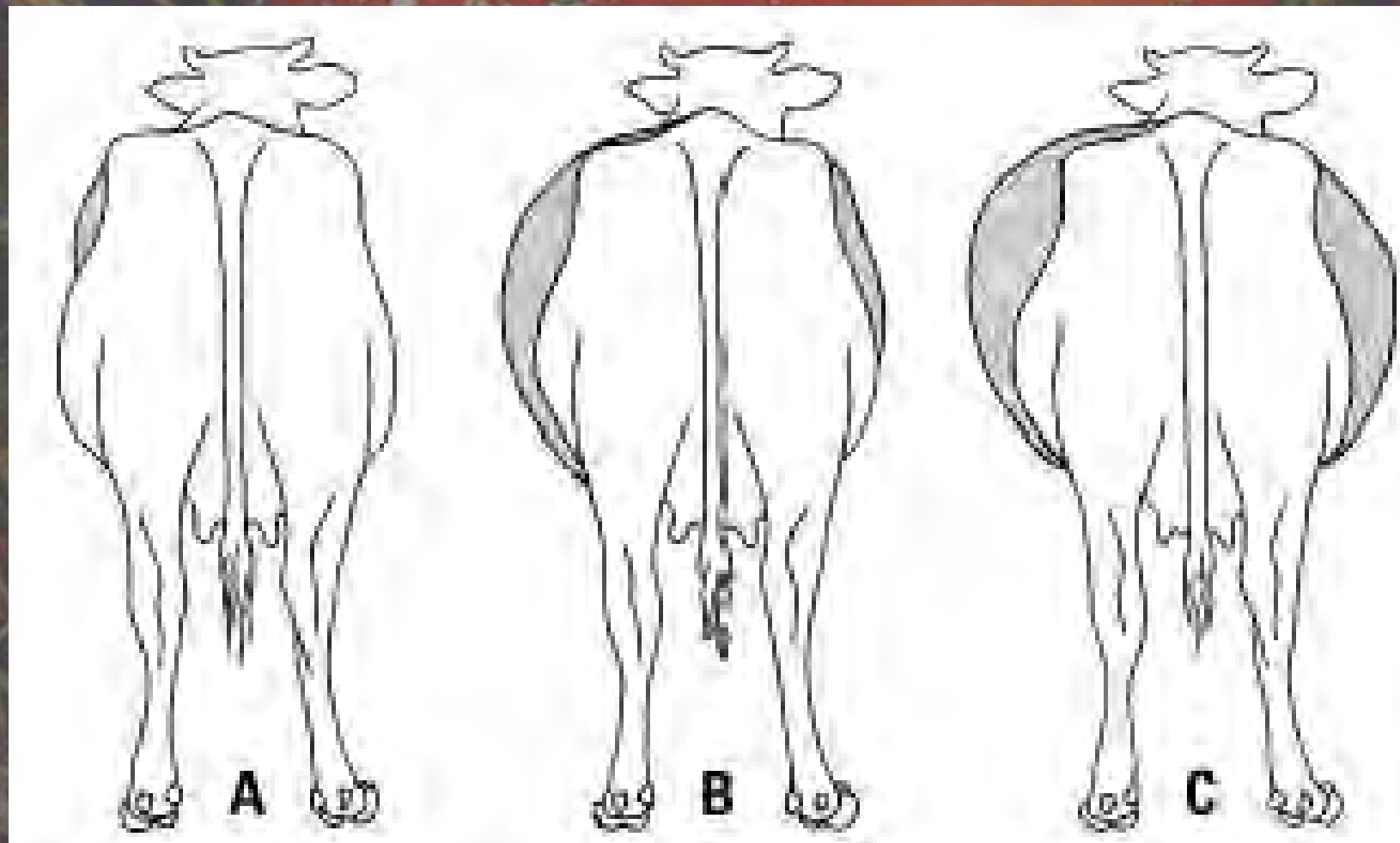


BLOAT



BLOAT



bloat

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



A large, red mushroom with white spots is growing in a field of dry grass. The mushroom is the central focus of the image, with its cap showing a vibrant red color and numerous white, irregular spots. The stem is thick and white. The background consists of a dense field of dry, yellowish-brown grass.

incidence

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

A red mushroom with white spots, likely a fly agaric, is growing in a field of dry grass. The mushroom is the central focus of the image, with its bright red cap and white spots contrasting sharply with the dry, brownish-yellow grass. The text 'aetiology' is overlaid on the upper part of the mushroom cap.

aetiology

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

pathophysiology

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

treatment

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



A red mushroom with white spots, likely an Amanita muscaria, is growing in a field of dry grass. The mushroom has a bright red cap with numerous white, star-shaped spots. The background is a dense field of dry, yellowish-brown grass.

treatment

- oils
- detergents
- household remedies for first aid

OILS

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



detergents

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



side effects

- diarrhoea
- excitation

first aid

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





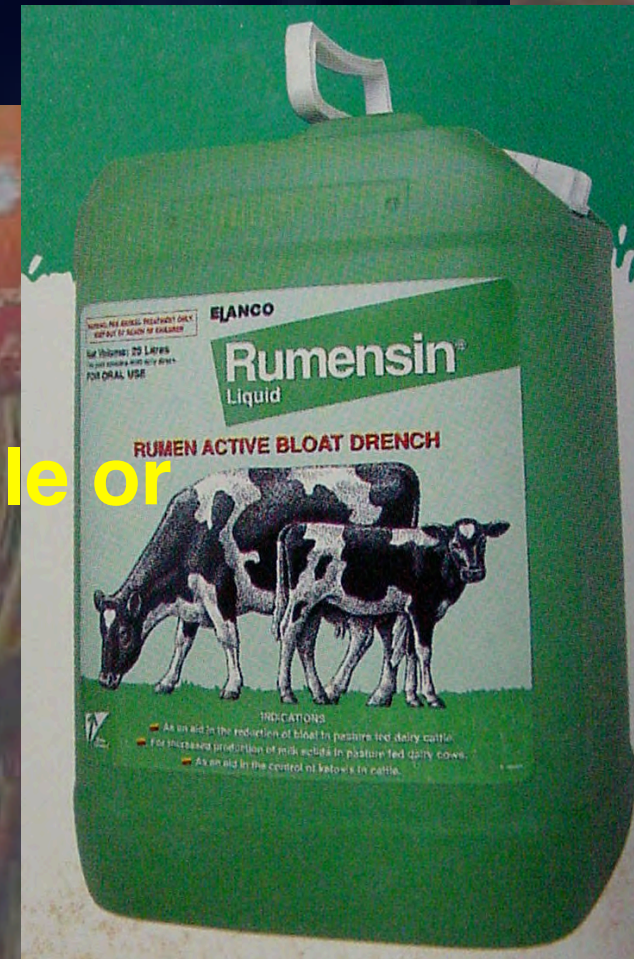
prevention

- 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

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

Rumensin



A red mushroom with white spots, likely a fly agaric, is growing in a field of dry grass. The mushroom is the central focus of the image, with its bright red cap and white spots standing out against the dry, brownish grass. The text is overlaid on the image in a yellow, sans-serif font.

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**