Bloat

**Bloat** is the common name for ruminal tympany, abnormal distension of the rumen (stomach) of cattle. It is caused by excessive retention of the gas produced by normal digestion that is usually belched, but in cases of bloat is trapped usually as a foam in the rumen. Severe bloat causes extreme distention of the stomach, resulting in pressure on all other internal organs, and can quickly lead to death.

**CONTROL**

Control of bloat includes pasture and grazing management, anti-bloat capsules, anti-foaming agents and as a last resort the old emergency rumenotomy (stab!).

**GRAZING MANAGEMENT**

Higher dry matter levels, hay feeding, longer rotations, species of plants grazed, continuous grazing and careful fertilizer application can all greatly aid in reducing bloat.

**ANTI-FOAM AGENTS**

Include: oils and fats, marlophens and detergents (alcohol ethoxylates and pluronics). These agents act by breaking down an already formed stable foam. Fats, oils and marlophens are safer, but slow to work and short-lived. Detergents are faster acting, and much more persistent but can be toxic if overdosed or given to calves.

**RUMEN MODIFIERS**

These prevent a stable foam forming by changing the proportions of microorganisms in the rumen and hence the way feed is broken down. These compounds also have the added benefit of increasing feed conversion efficiency.

**METHODS OF CONTROL**

**SLOW RELEASE CAPSULES** *(Monensin)*

- Give 100 days cover.
- Generally cost effective.
- Low time input; more peace of mind.
- Need to administer 5-7 days prior to expected bloat challenge.
- May need to use an anti-foaming agent as well during very severe challenge or in 1st 5-7 days.
- **Toxic to dogs and horses.**

**DRENCHING** *(TERICS, PLURONICS)*

- Can vary dose rates according to the challenge.
- Twice daily in moderate - severe challenge.
- Unsuitable in some sheds.
- Take care not to overdose.
- Never use detergents in calves - use oils.
- Low price option.
- High labour input.

**PASTURE SPRAYING**

- Use in the dry period, for heifers, in non-drenching sheds etc.
- Made of oils, emulsified oils and fats, detergents with sticking agent.
- Higher dose of active ingredient therefore higher cost.
- Must spray total area.
- Can only use 12-24 hours ahead.
- Break-feed. No back-grazing.
- High labour input.

*This problem costs New Zealand an estimated $45 million annually making it one of the most costly on-farm problems. Pasture bloat happens when cattle graze succulent, rapidly growing pastures in the pre-bloom stage. These pastures are high in protein, water and starch, but low in fibre. Clover content is often high but bloat can occur on pure Ryegrass too. In general, the more fertilised and higher producing a farm becomes, the higher the risk of bloat.*
TROUGH TREATMENT

- Most detergents can be used.
- Use trough or inline dispenser.
- Alcohol ethoxylates are more palatable.
- Introduce early: 2-3 weeks before bloat is expected.
- Need to ensure no access to untreated water.
- Treat milking shed troughs.
- Ensure easy access to treated troughs.
- Increase concentration of detergent when wet weather reduces water intake.
- Increase concentration 12 hours before grazing a dangerous paddock.
- Less reliable. Water intakes vary for many reasons.
- Use for background control; switch to pasture spraying or drenching during danger periods.

FLANK TREATMENT

- Paraffins, tallows.
- Frequent failures under challenge.

BLOAT LICKS

- Some application for dry stock and beef cattle.
- Some animals underdosed and at risk.

BLOAT REMEDIES

Nothing yet beats drenching in severe bloat conditions. For the best bloat prevention under severe challenge take note of the following:

- Use an alcohol ethoxylate active bloat drench like Blocare 4511.
- Drench twice a day at maximum dose of active plus very important to use plenty of water.
- As challenge lessens, reduce active as per label but keep water volume constant.
- Rumensin Bloat Capsules are okay for the prevention of moderate to medium bloat challenge but drenching should be done during severe challenge.

- Bloat Blocks and trough treatments are marginal but are better than nothing.

THE INEVITABLE BLOAT PANIC

- Have an emergency kit ready - knapsack and gun set on high dose ready made up detergent or bottles with individual doses ready to go.
- A sharp bloat knife - double bladed with guard plate.
- Maybe a rumen injector for “marginal” cases.

IF YOU HAVE TO STAB

- For example: if the cow can’t walk, is having trouble breathing / is collapsing (even if the cow is down and not breathing) - stab her - you’ve got nothing to lose and she may recover.
- Use a knife with hand guard, otherwise you risk severely cutting your own hand.
- Stab on the left side one handsnap down from the lateral processes of the vertebrae (short ribs) and one handsnap in front of the hipbone - one firm, clean stab of a decent size (5-10cm) to let the froth out.

Once the stomach (rumen) wall collapses and falls away from the body wall, leakage will occur and peritonitis will start to develop. Call the vet as soon as possible after the stab, we prefer to stitch wounds around 2-4 hours after stabbing. If it is sutured within a few hours of the stabbing, the peritonitis won’t get the chance to really get going and she’ll have a better chance of recovery.

REMEMBER:

- No one method of bloat control is 100% reliable.
- Bloat stab cows generally survive, but can be wasted in terms of that season’s milk production.
- Aim to prevent, not treat!