

## **Metabolic Diseases of Dairy Cattle - Bloat<sup>1</sup>**

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Bloat is caused by collection of gas in the rumen that the animal is unable to expel. Esophageal obstructions caused by such things as apples or oranges are common causes for the development of gas bloat. The accumulated gases consist chiefly of carbon dioxide and methane. Normally, these are eliminated by the animal without difficulty by either being absorbed, passed through the gut with the feces, or simply passed through the mouth by eructation (belching). Animals unable to remove gas as it accumulates in the rumen are said to be bloated. Distress symptoms include frequent urination, defecation, labored breathing and restless movements. Unless relief is offered to animals with severe bloat, death may result within a few hours or minutes.

### **PASTURE BLOAT**

Pasture bloat occurs in animals grazing or receiving green-chopped forage. Lush legume such as clover or alfalfa are more frequently associated with pasture bloat, but bloat may occasionally be observed in cattle grazing in a pasture containing a high proportion of grasses.

### **FEEDLOT BLOAT**

Feedlot bloat refers to that produced by a high-grain low-roughage ration. Unlike pasture bloat, feedlot bloat usually develops slowly over several weeks and may become chronic. Adding roughage to the ration is usually accepted as a measure to reduce the degree of foamy or frothy bloat. Certain types of roughage such as alfalfa hay and pelleted corrugated boxes, however, may intensify the bloat problem. Also, grinding and/or pelleting rations increase the incidence and severity of bloat.

Frothy or feedlot bloat presents a problem since the use of a stomach tube or trocar is of little value in relieving the condition. The use of oils and other defoaming agents can be administered by drenching or through a tube. About one cup of animal or vegetable oil usually will break the foam and permit the removal of large amounts of gas. Also, a defoaming agent may be injected into the rumen by a syringe fitted with a long needle.

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