

# Potassium Content (Not Calcium Content) of Forages Influences The Incidence of Milk Fever

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Paying attention to the mineral balance of the **dry cow three weeks before calving** can help decrease the incidence of milk fever at or shortly after calving. Research studies have shown that high amounts of potassium and NOT calcium in the total diet increase the incidence of milk fever. Thus, the potassium content of the entire diet should be below 2% potassium.

The first and most effective place to start is with the forages being fed. Corn silage is one forage that contains a lower amount of potassium. Alfalfa is usually higher in potassium than grass hays. Thus, the recommendation is to avoid large amounts of alfalfa for cows within three weeks of calving. Most years, later cuttings of alfalfa have lower concentrations of potassium and the tops of the stems have more potassium than the bottom stems and leaves. Both cool season grasses and legumes are luxury consumers of potassium. Thus, the recommendation is to minimize or to prudently use manures or fertilizer for grass hays fed to cows close to calving. Timothy hay has lower potassium content than other grasses. Also, wheat hay is generally lower in potassium.

Grain mixes should be formulated for the cow within three weeks of calving. These grain mixes should contain low amounts of potassium from grain sources and mineral supplements. In addition, buffers (such as sodium bicarbonate or baking soda) should not be fed to cows within three weeks of calving.

**Take Home Message:** The amount of potassium in the diet of **cows within three weeks of calving** influences the incidence of milk fever. First and foremost, forages with lower concentrations of potassium should be used to feed cows within three weeks of calving. Corn silage is an example of a high energy, low potassium forage. Buffers should not be fed to cows within three weeks of calving.