

## Vet's Corner: Subacute Ruminant Acidosis

In late fall, several foot trimmers reported higher incidence of sole abscesses and farmers complained of too many hoof blocks used during routine hoof trimming. In the summer, heat stress causes cows to slug feed and suffer rumen pH drop below 5.5; consequently, a few months later laminitis lesions appear. This winter, high incidence of sole abscesses persists past the time associated with summer heat stress, so other factors that contribute to Subacute Ruminant Acidosis should be investigated.

If the herd milk fat test is normal, can this report be disregarded? Probably not. While it is true that an acidotic cow will have depressed butterfat, a herd suffering chronic acidosis can test normal due to sufficient normal and cured animals diluting out the effect of affected animals. So before disregarding the significance of rumenitis look for further symptoms such as

- Lameness rate >15%,
- Paintbrush hemorrhages on the sole during routine hoof trimming of "normal" cows,
- Unexplained abscesses in the liver and kidney that show up on post-mortem exams,
- Poor response to conventional treatments for Metritis, mastitis, and a variety of health problems,
- Sudden deaths from hemothysis (unexplained bleed out in the abdominal cavity),
- Annual herd culling rate >45% for poorly defined reasons.

This winter, several factors are combining to promote acidosis. Inconsistent weather during harvest has caused a wide range of moisture content of forages. A common practice is to adjust forage weight if the cows don't clean up the bunk. If the change is due to anything other than the forage dry matter, the adjustment reduces forage and the feed becomes fiber deficient and can lead to acidosis. Weekly forage moisture monitoring is part of TMR management.

This winter, many are forced to feed low quality forages and make up for production with heavier concentrate feeding. Any process that makes more starch available in the rumen can overwhelm the lactate utilizing bacteria and lead to lower rumen pH. In a fiber-challenged ration, the addition of more than 2 lbs of supplemental fat reduces protozoa, which naturally stabilize rumen fermentation.

Lastly, in our top genetics herds that have the capability of consuming greater quantities of dry matter, the total intake of rumen fermentable carbohydrate will be too high even though ration specs are within acceptable safe ranges.

DMI (lb/day)	x	NFC%	=	NFC lb/day
47		37		17.4
59		37		21.8

In this example with safe NFC%, the high producing cow that can consume 12 more pounds of dry matter is taking in 4.4 more pounds of rumen fermentable carbohydrate. This illustrates that increased awareness of rumen acidosis should accompany genetic progress and feed management improvement.

Kent E Henderson, DVM  
[Hugamoo@comcast.net](mailto:Hugamoo@comcast.net)