CORRECTING ACIDOSIS



Ruminal Acidosis Risk Factors

Carbohydrate/Fiber Imbalance

- Eating too many rapidly digestible carbohydrates
- Errors in dry feed calculation
- Animals feeding in too tight quarters
- Feeding time schedule is rushed or inconsistent
- Sudden or drastic dietary changes
- Any cycles of feed deprivation followed by overeating

Heat Stress

- Elevated heart and respiratory rates lower rumen buffering
- Heat avoidance and fatigue decrease meal frequency

Reproductive Stage

- Primiparous cows on first lactation diet
- Early lactation dietary changes affecting gut microbe levels

HEALTHY RUMEN

pH 6.2-7

ACUTE RUMINAL ACIDOSIS (ARA)

₀H <5 5

HIGH DEATH RISK

Stages of Acidosis

Subacute Ruminal

Acidosis (SARA)

SARA is a milder and more correctable form of acidosis when rumen pH dips below ~5.8 for several hours a day. When too many quickly fermentable carbohydrates are eaten, volatile fatty acid levels increase, creating a more acidic environment of decreased microbe activity.

Acute Ruminal Acidosis (ARA)

ARA is the severe and deadly stage of acidosis when ruminal pH drops below ~5.5 for several hours. Correction before ARA sets in is critical because even if recovery occurs, they will likely have future liver and other health complications.

Acidosis Fixes and Treatments

Change Carbohydrate/Fiber Intake

When herbivores eat plant based materials, they are consuming 2 types of carbohydrates: structural carbohydrates (fiber rich carbs), and nonstructural or nonfiber carbohydrates (starches, sugars, some pectins). Some feeds have higher NFC levels than others. Below is a ranking of feeds by average NFC levels from the Canadian Department of Agriculture:

Corn- 75%	47% Soybean meal- 34%
Wheat- 65%	Corn silage (few ears)- 29%
Barley- 62%	Alfalfa (midbloom)- 24%
Corn silage (well eared)- 40%	Dried distillers grains- 16%
Beet pulp- 39%	Canola meal- 11%

Grasses naturally have more structural carbohydrates and thus have higher fiber than grains. If possible, increasing access to forage (grazing or dried) can also help fiber vs. carb balance.

Reduce Heat Stress

Protecting a herd from excessive heat helps feeding, grazing, watering, and resting patterns continue as normally as possible.

Adjust Feeding Practices

- Watch for selective feeding- adjust the ratio of large to small particle sizes in your dry feed to prevent selective eating
- Give your animals more space to feed to reduce competition
- Try providing smaller and more frequent meals
- Follow feed packaging and vet instructions carefully
- · Increase forage and/or transition to a higher fiber feed

Use A Rumen Buffer

Saliva is a natural buffer for acid levels in the rumen, but modern livestock benefit from additional supplementation. Alkaline supplements can easily be added to feed rations both as a preventative and corrective measure for acidosis.





Conditioner- for weaned and mature ruminants Volcanic bentonite and minerals that buffers just as efficiently as sodium bicarb, improves feed efficiency and fiber digestion, controls ammonia levels, and binds to feed toxins.

Rumen Buffering with REDMOND



First Month- for newborn ruminants

Immune stimulator made with Redmond Conditioner, probiotics, and yeast derivatives that has been shown to reduce newborn death losses by 63% (UC Davis Study)

Redmond knows that when your animals feel good, you feel good. Since the 1950s, our livestock mineral and conditioner program has helped operations all over the continent thrive. Contact us today to see how we can help you get back to what you love about raising animals!

Contact Us Today

866-403-1565

hello@redmondagriculture.com

Redmond Minerals ATTN: Ag Customer Service 2725 N. 100 W. PO Box 219 Redmond, UT 84652