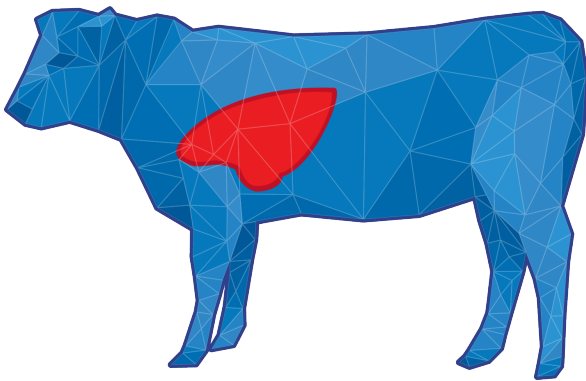


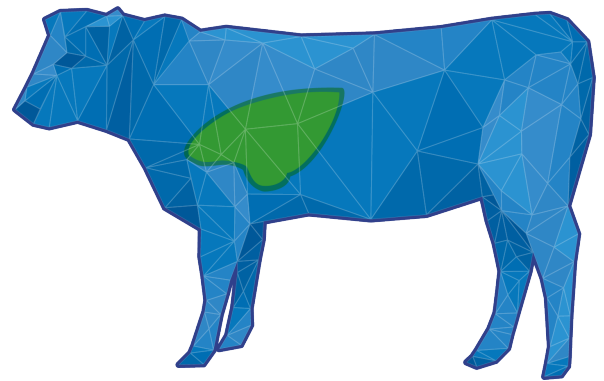
REDUCE CLINICAL SIGNS OF AIP USING AMINO ACID CHELATES

AIP is the #2 cause of feedyard mortality
3.1% of all cattle on feed develop AIP (NAHMS)

AIP



DUOPORTDRENCH



CATTLE WITH AIP:

- Better performing feedyards have more AIP
- 78.4% of all feedyards diagnosis AIP (NAMS)
- AIP affected animals have a 3:1 heifer to steer ratio (Loneragan)
- AIPs occur all year long but peak in summer months
- Respond poorly to traditional treatment

**UP TO 80% DEATH LOSS
WHEN UNTREATED**

WITH DUOPORTDRENCH :

- Over 2,100 head treated to date
- Respond rapidly to treatment
- >50% lose clinical signs in <12 hrs
- Cattle return to breathing and eating normally
- Cattle go on to ship
- 0 day withdrawal

**REDUCE DEATH LOSS
FOR \$0.30 PER DOSE**

AIP IS A SYMPTOM OF RAPID METABOLIC TOXIN BUILDUP

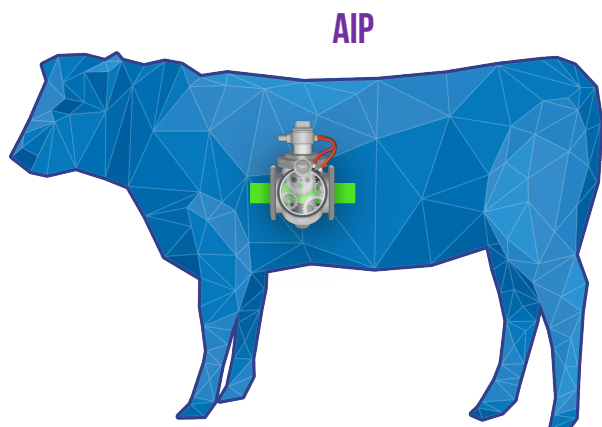
THE TRACE MINERAL PUMP

CATTLE HAVE AN INTERNAL PUMP IN THE RUMEN AND SMALL INTESTINE TO DELIVER TRACE MINERALS CRITICAL FOR DETOXIFICATION.

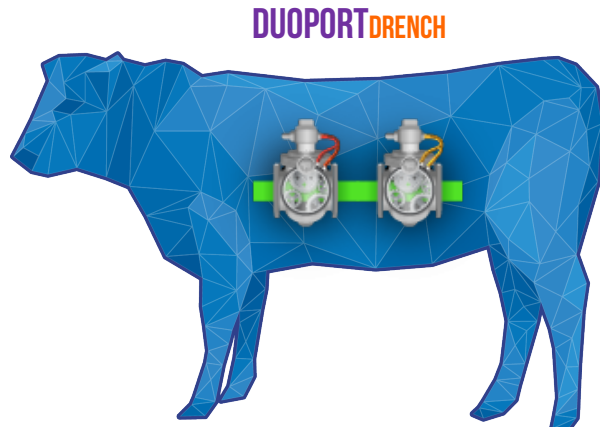
Rapid growth can exceed the trace mineral pump's capacity to deliver the ration's trace minerals for detoxification.

AIP occurs when an animal can not absorb sufficient minerals such as Cu/Zn/Mg quickly enough to continue normal metabolic function.

DUOPORT DRENCH ACTIVATES A SECOND PUMP



AIP's can occur when rapid growth exceeds the primary trace mineral pump's capacity to deliver necessary trace minerals.



DuoPort Drench delivers higher doses of trace minerals via a second pump, the amino acid transporter, reducing acute AIP symptoms

DUOPORT DRENCH TARGETS A SYSTEM NOT NORMALLY INVOLVED IN TRACE MINERAL ABSORPTION - THE AMINO ACID TRANSPORTER.

DUOPORT DRENCH TRACE MINERALS ARE BONDED TO AMINO ACIDS. THE ANIMAL'S BODY RECOGNIZES THE COMBINATION AS AN AMINO ACID AND ABSORBS THE TRACE MINERAL FULLY.

TRACE MINERAL RAPIDLY BECOMES AVAILABLE AND ALLOWS CATTLE TO RETURN TO NORMAL METABOLIC FUNCTION.