What is FerAppease?

The active ingredient of FerAppease is a synthetic analogue of the Maternal Bovine Appeasing Substance (MBAS). MBAS is naturally secreted by the sebaceous gland located on the skin of the mammary gland with the unique function of inducing an appeasing effect on the nursing offspring.

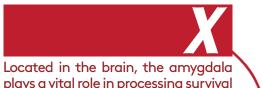
When should I apply FerAppease?

Apply FerAppease every time an animal is exposed to stress where suppression of threat perception is desired.

Management Stressors: weaning, dehorning, transportation, castration, branding, commingling, vaccinating

Physiological Stressors: parturition, interruption of lactation (dry-off), breeding

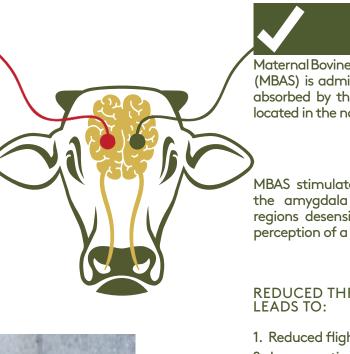
Threat Perception and FerAppease

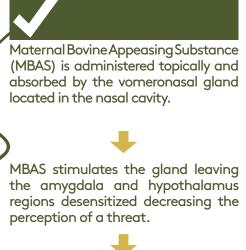


plays a vital role in processing survival emotions such as fear and anger and quickly determines whether environments are perceived as safe or threatening.

Once a threat is perceived, the hypothalamic-pituitary-adrenal (HPA) axis is activated which leads to an increased release of the alucocorticoid hormone cortisol from the adrenal glands.

Ultimately, when threats are perceived by the amygdala, cortisol is released which leads to elevated inflammation, decreased dry matter intake (DMI), weight loss, and increased morbidity and mortality.



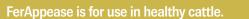


REDUCED THREAT PERCEPTION

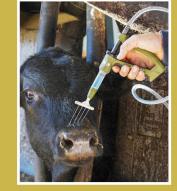
- 1. Reduced flight zones
- 2. Lower cortisol levels
- 3. Lower inflammation
- 4. Lower morbidity and mortality
- 5. Increased weight gain

How should I apply Ferappease?

Apply 5 ml of FerAppease topically behind the poll of the head and a second 5 ml application to the skin above the muzzle.









Thank you to FerAppease for the nuge improvement you've made in our program. We blended 42 bulls from four locations together for the first time. They're not fighting, they're not riding, they go to feed and comingle better. I've never seen anything like it!"

> **Donnell Brown RA Brown Ranch**



'FerAppease has eliminated a ton of our problems. I will not buy a set of calves without using this. I think FerAppease has made me more money than any product l've ever used.'

> Jeff Slatten Beaver County Stockyards



"FerAppease has become a part of our operation for incoming cattle. We don't know a lot of the background of these cattle coming out of the salebarns; sometimes they haven't been weaned yet so we like to use FerAppease with the first processing. When your cattle are satisfied and content they will eat more and stay healthy longer."

Tanner Stucky **Tiffany Cattle Company**

MADE IN THE USA | MANUFACTURED IN COLLEGE STATION, TEXAS





"We all know that stress is a precursor to a lot of other underlying diseases. If we can create an animal that is less stressed, one pound will pay for the whole cost of FerAppease."

> Brock Hanel, DVM Courtland, KS



The big thing we have seen once we started using FerAppease is that reduction in bawling, that reduction in stress that is associated with the weaning process. Anytime you can reduce stress you reduce cortisol response and cortisol causes immune suppression."

> John D. Tyra, DVM Animal Clinic of Monett **Joplin Stockyards**



"We weaned and I treated the steers with FerAppease and I did not treat the heifers. The first day the steers cleaned the bunk and the heifers probably ate 25%, they didn't even eat enought to refill the bunk. The heifers never settled down, they were circling and didn't care to eat. The steers would drink, they weren't circling, and their appetite was so much better.'

Jennifer Poindexter-Runge, DVM Rancher, Ree Heights, SD



FerAppease® FERAAH.COM 979.213.6470



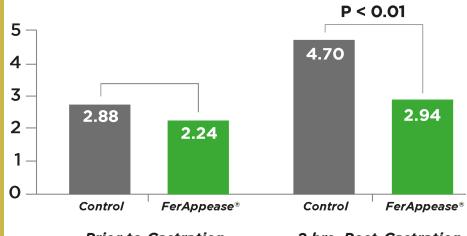
For every \$1 invested in FerAppease, you return over \$15.



Diagnostics and Biologicals



FerAppease on the Ranch Treatment at time of stress



Prior to Castration

2 hrs. Post-Castration

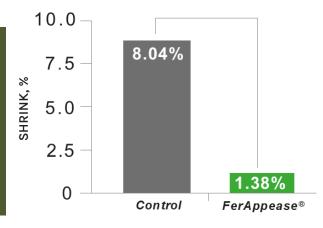
Weaning with FerAppease

How does FerAppease improve post-weaning weight gain?

The active ingredient in FerAppease, Maternal Bovine Appeasing Substance (mBAS), is the maternal pheromone that links the calf to its mother. FerAppease substitutes this natural maternal pheromone and gives the calf the comfort of being with mom. By mitigating the stress and cortisol production from separation, calves treated with FerAppease lose dramatically less weight during the weaning transition and get started on feed faster.

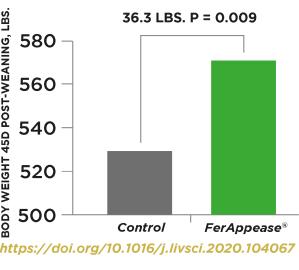
Shipping with FerAppease

The stress hormone epinephrine is known to increase gastrointestinal movement which causes nutrients to exit the body before they are fully digested during short-length hauls. This leads to the problem commonly referred to as shrink. By mitigating the physiological stress response, FerAppease reduces cortisol and epinephrin, significantly reducing bodyweight shrink across the scale.



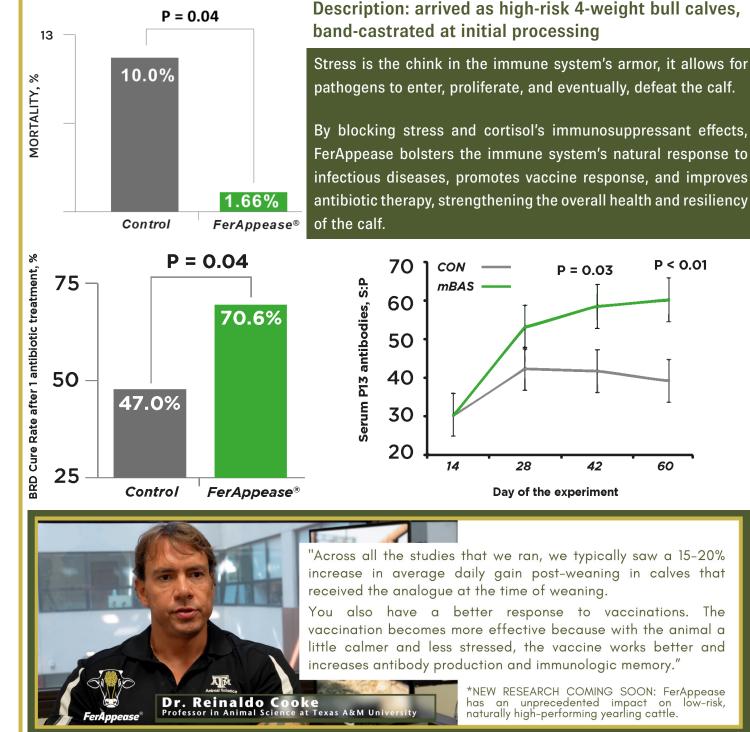
Branding and Castrating with FerAppease

reducing the stress hormone, cortisol, the calf's post-castration stress response significantly mitigated, allowing for faster and less <u>oainful recovery.</u>



FerAppease at the Backgrounder Treatment at arrival and re-vaccination

Improve Health, Increase Return



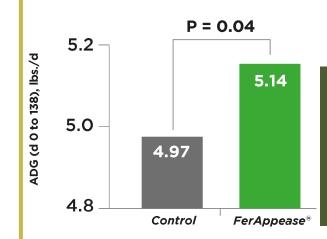
Description: arrived as high-risk 4-weight bull calves,

NEW RESEARCH COMING SOON: FerAppease

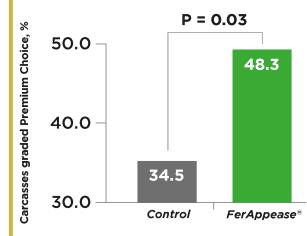
FerAppease at the Feedlot

Treatment at arrival and re-implant

Capitalize on Pounds, Performance, and Productivity



P = 0.04 990 984.2 970 968.6 950 Control **FerAppease**®



Description: arrived as 9-weight steers, harvested at ~1600 pounds

Feedlot arrival and re-implant are times of stress for cattle. All cattle are sensitive to change in routine and diets. This stress directly leads to inefficiencies and drops in productivity. FerAppease limits the stress response, allowing for cattle to maintain normal feed intakes and improve production efficiency.

Cortisol is known to induce catabolism, meaning that fat and muscle tissues are breaking down to provide energy to the stressed body. FerAppease mitigates the stress response, which capitalizes on both performance and gains in meat quality characteristics that would otherwise be lost due to igh-stress intervals at arrival and re-implant.

HCW increased by over 15 pounds.

FerAppease protects feedlot cattle from weight loss that occurs during the intervals of stress. By mitigating the stress response at arrival and re-implant, cattle treated with FerAppease maintain healthy and normal behavior during these stress intervals, capitalizing on growth that would have otherwise been lost due to stress.

"FerAppease resulted in a return-on-investment (ROI) of FerAppease® 1,541 percent." - Dr. Reinaldo Cooke, Journal of Animal Science



