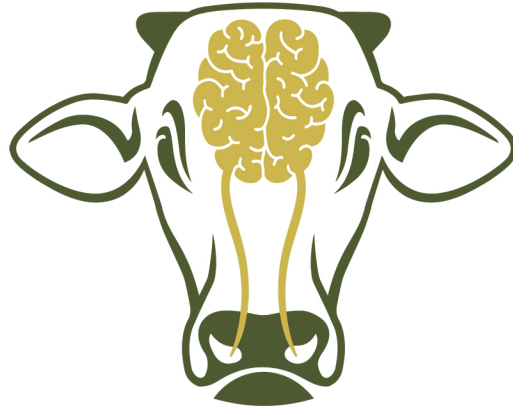




**GIVE THEM THE
COMFORT OF
BEING WITH MOM.**



FerAppease[®]

Maternal Bovine Appeasing Substance

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.
- FerAppease[®] is used topically and the active ingredient (MBAS) is assimilated by the vomeronasal gland located in the nose of the animals. The MBAS stimulation of the vomeronasal gland desensitizes regions of the amygdala and the hypothalamus, dramatically decreasing threat perception and its downstream stress consequences.



Threat Perception

- Domesticated food animals are prey species that evolved over thousands of years to perceive threats and avoid predation.
- In a threatening situation, the amygdala and areas of the hypothalamus are overstimulated and will trigger short- and long-term physiological changes
- Under current farming conditions, threat perception serves little to no purpose. Fear leads to stress and eventually to increase morbidity, mortality, and lost productivity.



FERA

Diagnostics
and Biologicals

Contact Premier Select Sires to place an order! ♦ (800) 227-6417 ♦ premierselectsires.com

Threat Perception and FerAppease®

The amygdala responds quickly to potential threats in the environment and plays a key role in determining whether environments are perceived as safe or dangerous.

Threat perception leads to activation of the hypothalamic-pituitary-adrenal (HPA) axis leading to increased release of the glucocorticoid hormone cortisol from the adrenal glands and increased release of the catecholamines epinephrine and norepinephrine.

Threat perception ultimately leads to elevated inflammation, decreased DMI, weight loss, increased morbidity and mortality

PERCEIVED THREAT



Typically administered Maternal Bovine Appeasing Substance (MBAS) is locally assimilated by the vomeronasal organ located in the nasal cavity.

MBAS mediated stimulation of the vomeronasal gland desensitizes regions of the amygdala and the hypothalamus decreasing the perception of threat.

REDUCED THREAT PERCEPTION LEADS TO;

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



When should we use FerAppease®?

- FerAppease® can and should be used every time animals are exposed to management and physiological stressors where suppression of threat perception is desirable, specifically;
 - Stressful management strategies such as; *weaning, dehorning, castration, branding, transportation, commingling, vaccination etc.*
 - Stressful physiological events such as *parturition, interruption of lactation (dry off), breeding, etc.*

How is FerAppease® applied?

- FerAppease® is for use only in healthy cattle by topical administration to the nuchal skin and the skin above the muzzle.
- **For adult animals:** Apply 5ml of FerAppease® to the nuchal skin and a second 5 ml application to the skin above the muzzle.
- **For youngstock:** Apply 2.5ml of FerAppease® to the nuchal skin and a second 2.5 ml application to the skin above the muzzle.



SCAN HERE
FOR MORE
INFORMATION



For technical assistance please contact Fera Diagnostics and Biologicals Corp. at 979-213-6470, inquiry@feraah.com

- Manufactured in the U.S.A under cGMP and CFR Part 11 requirements 
- Manufactured For: Fera Diagnostics and Biologicals Corp. College Station, Texas, United States.


FERA
Diagnostics and Biologicals



Contact Premier Select Sires to place an order! ♦ (800) 227-6417 ♦ premierselectsires.com