

STAND STRONG™ FOR RUMINANTS + COMFORT™



CHALLENGE: HEAT STRESS

WHAT IS HEAT STRESS?

As temperatures and humidity levels reach above 68°F, dairy cows experience physiological stress trying to manage their heat load. In high producing dairy cows, milk production may decrease as much as 50% when temperature/humidity indexes are greater than 90°F.¹

Economic losses from heat stress are estimated to cost the dairy industry
OVER \$900 MILLION EACH YEAR.²

WHAT ARE THE SIGNS OF HEAT STRESS IN DAIRY COWS?

Cows sweat at only 10% of the human rate, making them very susceptible to heat stress.³ In an effort to dissipate heat, dairy cows cool themselves off through respiration, reduced feed intake and radiating heat from their bodies. Signs of heat stress include:

Visible Signs of Heat Stress
Decreased dry matter intake and increased water intake
Open mouth panting and drooling
Increased respiratory rate
Agitation and restlessness
Decreased milk yield
Higher somatic cell count (SCC)

Internal Signs of Heat Stress
Decreased conception rates
Lower immunity
Increased risk of mastitis and disease
Increased risk of acidosis
Increased risk of lameness
Increased maintenance energy

³ Chart adapted from, *Effects of heat stress in dairy cows*⁴

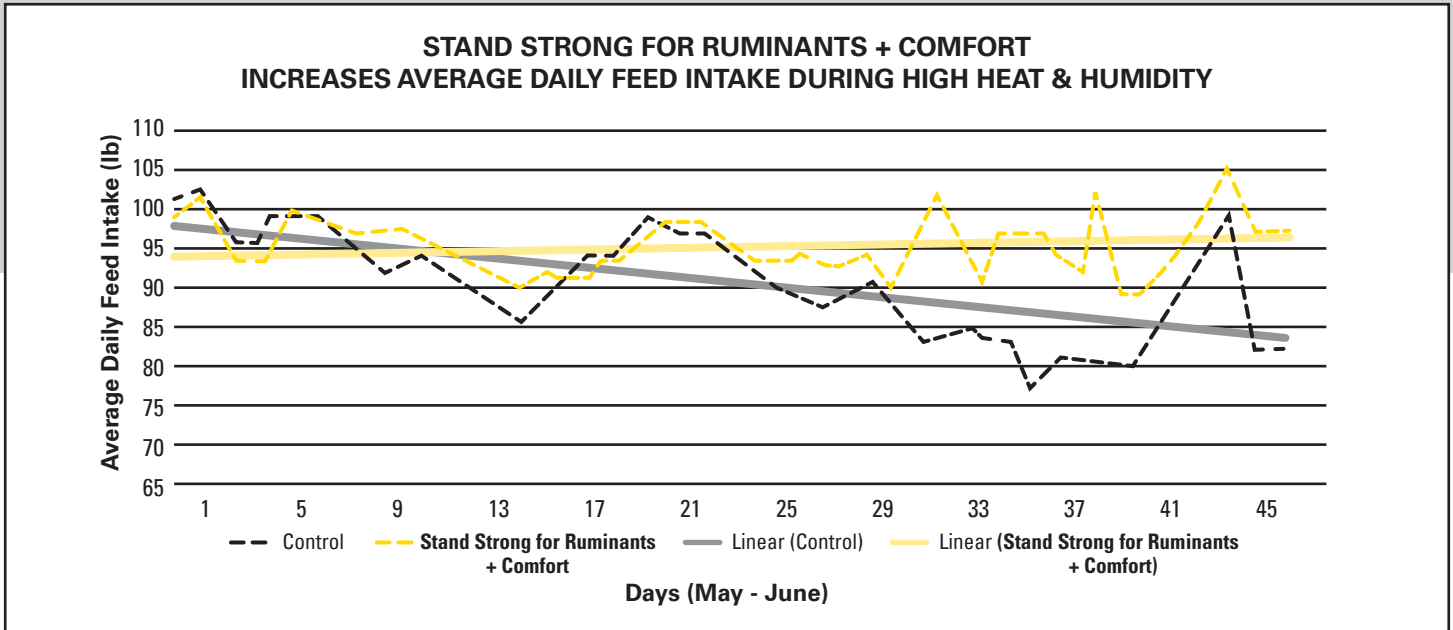
HOW TO MINIMIZE HEAT STRESS:

Heat abatement, or the reduction of heat stress, is critical for dairy producers to achieve in order to minimize production losses. Dairy cows will automatically reduce feed intake at the first signs of heat stress, which accounts for up to 40-50% of milk production decreases.⁴ Supporting feed intake during summer months is critical to maintaining productivity.

To combat heat stress and maintain feed intake, the **Strong Animals®** team formulated **Stand Strong™ for Ruminants + Comfort™**.

RESEARCH PROVEN: STAND STRONG FOR RUMINANTS + COMFORT

Stand Strong for Ruminants + Comfort research proven to help with heat abatement in dairy cows. A study conducted from May - June in Florida where weather conditions consisted of intense heat and humidity, showed that cows fed **Stand Strong for Ruminants + Comfort** maintained and slightly increased average daily feed intake while control cows significantly backed off.



Another study done by South Dakota State University using an infrared thermometer to measure surface temperature showed **Stand Strong for Ruminants + Comfort** kept dairy cattle several degrees cooler.

Body Temp (°F)	Stand Strong for Ruminants + Comfort	Control	Change
PHASE 1	82.22	83.84	1.62
PHASE 2	77.36	81.86	4.5
AVERAGE	79.79	82.85	3.06



PROTOCOL: HEAT ABATEMENT

Stand Strong for Ruminants + Comfort

- Dairy Cows: Feed 1/4 to 1/2 oz. per head per day through summer heat challenges.

References:

- 1) <https://www.uaex.edu/publications/pdf/jsa-3040.pdf>
- 2) <https://www.progressivedairy.com/topics/barns-equipment/behavioral-responses-to-heat-stress>
- 3) <https://extension2.missouri.edu/g3620>
- 4) <https://www.progressivedairy.com/topics/health/nutritional-strategies-to-enhance-heat-abatement-in-dairy-cows>



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