



Dairy Research and Economic Impact

Take the stress out of extreme temperature challenges.

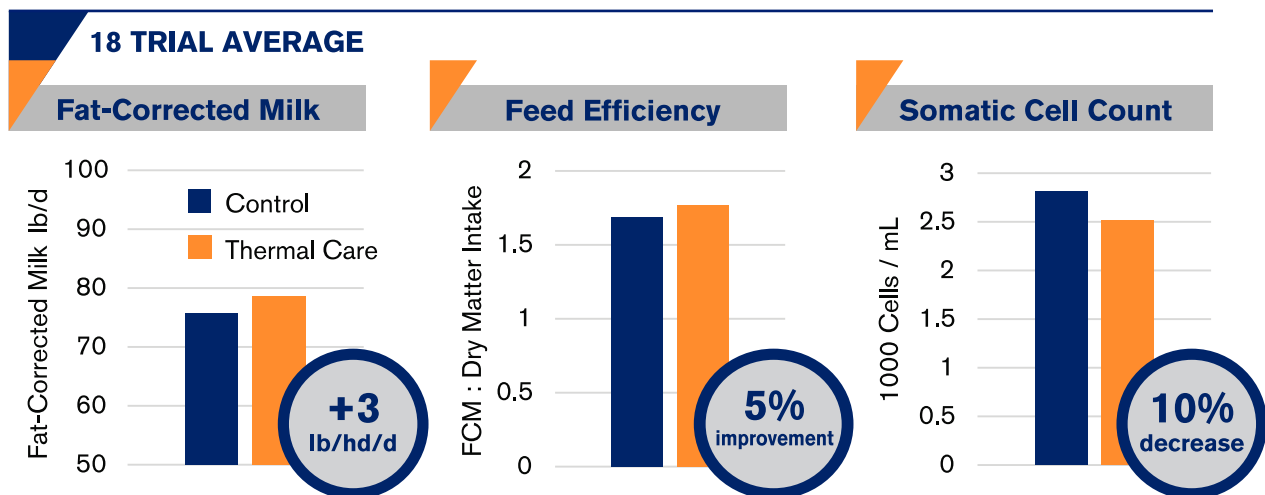
Thermal Care™ can help minimize the effects of extreme temperatures on production and mitigate some of the long-term consequences on animal well-being and gut health.

Research proven

Research studies have reported that Thermal Care facilitates the animals' ability to cope with the stressors that lead to negative impacts on feed intake, milk production, body condition and growth.^{1,2}

2006 – 2017 Research

- 18 lactation trials — 10 different states
- 2000 cow total tested (average of 125 cows per trial, ranging in herd size up to 525 head)
- Field and university trials (CA, AZ, PA, IN, GA, OH, MI)
- Completed during heat-stress periods
- Average feeding length: 72 days ranging up to 120 days
- Average dose: 52 g/hd/d ranging from 45-56 g/hd/d
- 80% of trials had positive fat-corrected milk production response (no significant protein response)



Economics with Variable Milk Prices and Feed Costs

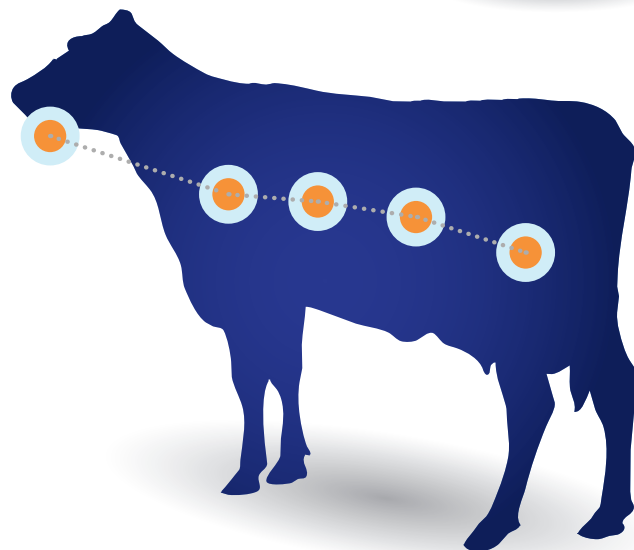
Revenue Estimates and Investment Based on Meta-analysis of 18 Trials		Cows	Days in Milk	Milk lb/head/day	Thermal Care \$/head/day
		100	150	80	\$0.16
		Feed Costs/lb Dry Matter			
		\$0.10	\$0.12	\$0.14	\$0.16
Milk Prices	\$25.00/cwt	\$16,710	\$17,156	\$17,601	\$18,047
	\$23.00/cwt	\$15,552	\$15,997	\$16,443	\$16,888
	\$21.00/cwt	\$14,393	\$14,838	\$15,284	\$15,729
	\$19.00/cwt	\$13,234	\$13,680	\$14,125	\$14,570
Thermal Care Investment (fed for 150 days)					\$3,000.00

Where is the additional revenue generated?



Physiological Impacts

Consult your ADM professional to implement Thermal Care into your nutrition program; reducing the performance slump caused by stress.



Meta Analysis by ADM Animal Research

1. Boyd, et al. 2010. *J. Dairy Sci.* Vol. 91, E-Suppl.1. ADM D08301.
2. Skrzypek, et al. 2010. *J. Dairy Sci.* Vol. 93, E-Suppl. 1. ADM D09304.

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