

The research behind Thermal Care.

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}

Decreased body temperature

In controlled thermal chamber trials, body temperatures were lowered 0.6°F in growing steers and 0.5°F in lactating Holstein cows fed Thermal Care compared to controls (Figure 1). These reductions in body temperature help ensure animals spend less time near upper critical temperatures at which feed intake and performance will be severely compromised.



Beef

- Cattle consuming Thermal Care gained more weight (0.27 lb/hd/day) while consuming less feed than control cattle (Figure 2).



Dairy

- Figure 3 shows the lactation performance of Holsteins in university trials and a Florida field study. On the average, under conditions of high heat stress, cows fed Thermal Care consumed 2.2 lb more feed (dry matter basis) and produced 3.3 lb more milk compared to controls.
- In the University of Georgia study, Thermal Care also tended to increase body weight gain when compared with control cows (1.1 vs 0.6 lb/hd/week).

Figure 1: Body Temperature Increase During High Heat Stress

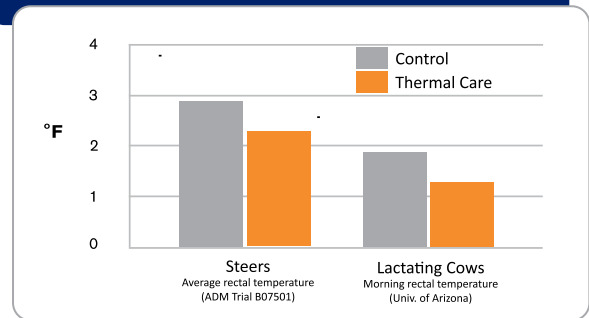


Figure 2: Weight Gain During Heat Stress

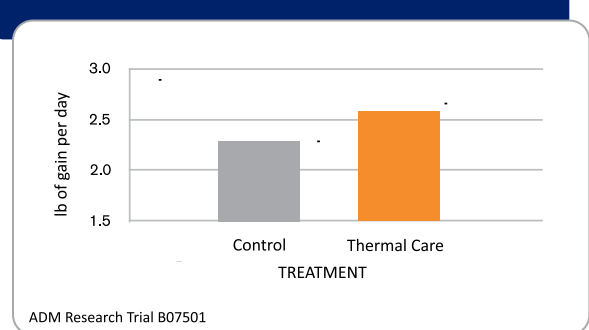
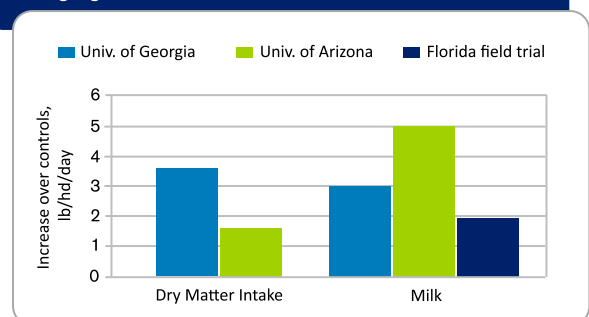


Figure 3: Feed Intake and Milk Production During High Heat Stress



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.

Consult with your ADM professional today to implement a heat abatement strategy to help minimize the performance slump caused by summer stress.