

Heat stress? On your farm? Yes.

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Reflecting on last summer, can you estimate your stress level?

The beginning of the warmer months usually comes with a lot of questions, and stress... "Will my cows tolerate the heat? Will their milk production drop, how long will it take to come back up? Will their reproduction be impacted?" Are you always trying to put in place ideas to help them deal with heat stress better? Now that this specific stressor is over, winter is the perfect time to make some necessary and important barn improvements to ensure that your whole herd is setup for a productive summer, with heat stress being less of a stressor for you and your cows.

You can only improve what you measure. The first step to understand what kind of heat stress your cows might be enduring is to monitor your barn and gather data. Then, you can focus on ventilation, shade and cooling to help your herd deal with the specific conditions they are facing in your barn.

Monitoring your Barn

Monitoring the temperature in your barn is important to truly understand the potential heat stress your cows are facing; you may feel fine, but your cows might not. There are 'smart' temperature sensors, which can monitor barn temperature and humidity levels, that alert you when your cows are at risk of suffering from heat stress, especially useful when you might not be suspecting it. Cows begin to be negatively affected by heat stress at only 24°C and 20% relative humidity. It is also important to manage your barn's stocking density to reduce its added impact on heat stress during the summer.

Ventilation strategies and effective cooling

Implementing proper ventilation, shade, and cooling systems (such as sprinklers) can effectively reduce heat stress in your herd. Consider the following preventative measures to further minimize heat stress:

- **Ensure curtains open and close efficiently**
- **Vents are clean and providing maximal airflow**
- **Fans evenly dispersed throughout the barn to create a consistent breeze across the entire barn**

- **Reflective roofing material to reduce heat absorption into the barn**
- **Overhangs, awnings, and shade curtains can reduce direct sunlight into the barn**
- **Sprinkler systems above feed bunks; ensure water droplets are small, larger droplets will leave cows wet without effective cooling, potentially worsening heat stress**

Important during the summer months and for the future of your herd

Not only is heat stress a concern for current milk production, it's also very important to consider the effect on future performance of your herd. Heat stress during the dry period can lead to decreased performance in the subsequent lactation (up to 4 kg/day) due to compromised mammary gland development. Heat stress during pregnancy will also negatively impact the calf's future performance (studies have shown decreased pregnancy rates and reduced milk yield by 5kg).

Regardless of whether you have systems in place, need to make improvements or enhancements are not feasible at this time, make sure your systems are clean, and well-maintained for optimal efficiency for your whole herd!

Nutrition: Another valuable solution

During heat stress, your cows are wasting energy trying to cool their bodies, however we want your cows to use their energy efficiently. B vitamins are co-factors that speed up their metabolism, ensuring maximum production of fats, proteins and glucose from their ration. A solution to ensuring cows have the nutrients and vitamins they need to combat heat stress and the negative effects of it, is to supply a Protected Blend of B Vitamins. B vitamins can minimize oxidative stress and improve liver function, which is of critical importance for heat stressed cows.

Want more information on other ways to help your herd deal with heat stress?

Contact your Jefo representative.
References available upon request.



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