

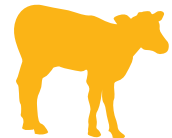
# Managing calves in warm/hot weather



In warm or bright conditions, when there is heat and light intensity, calves are at risk of heat stress. During these periods, energy is used to lose heat from the body by sweating and increasing respiratory rate.

## Upper Critical Temperature (UCT)

At environmental temperatures above 25°C, calves will become heat stressed – to counter this, they will start to sweat in order to lose some of the excess heat. Feed intake will be reduced while energy will be directed away from growth and the immune system to aid with cooling of the core temperature. This will reduce the growth rate of the animal and increase the risk of disease.



25°C Upper Critical Temperature



## Heat stress – the calf

- At environmental temperatures above 25°C, the calf's body temperature will rise
- In an attempt to keep cool, calves will



- Breath quicker
- Drink less milk and eat less feed
- Drink more water
- Spend longer standing and less time lying

- Energy is diverted to maintain core body temperature, making less energy available for growth
- Immune system is suppressed which reduces the calf's ability to fight off disease.

## Maintaining growth rates during warm weather

- Invest in a thermometer for the calf building/accommodation
- Monitor temperature daily, at calf level, in the calf housing
- Observe for any calves sweating, panting or drinking excessively – if monitoring rectal temperatures, any above 39.4°C are heat stressed
- Feed extra energy by increasing volume of milk or concentration of milk solids
- Keep water out of direct sunlight and change often
- Reduce stocking rate
- Increase airflow into the building but avoid draughts at calf level
- Provide shade so calves can move out of direct sunlight to avoid overheating
- Control flies to reduce the risk of disease spread.

## Roof lights



Roof lights are beneficial in reducing the need for artificial lighting, thus reducing lighting costs, but they can increase heat within a building when fitted on the south-facing aspect. To avoid overheating it is recommended that roof lights are fitted to the north-facing aspects of the building.

**High humidity and poor airflow in a well-stocked building can result in heat stressed calves even in cooler months.**

## Temperature rises

In summer, when temperatures rise, remember that when you start to sweat so do calves. Take steps to help them cope with the heat.

## Remember the basics

- Offer plenty of water at all times
- Replace starter daily to keep it fresh
- Clean and disinfect water and milk feeding equipment daily. Warm weather promotes growth of algae, mould and bacteria.

### Feeding hygiene



Hygiene of feeding equipment is covered in the AHDB Dairy film, 'Colostrum hygiene' which is part of the wider calf management series of films.

For more information on calf management,  
please visit the web: [dairy.ahdb.org.uk/calves](http://dairy.ahdb.org.uk/calves)

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