



Rochester Veterinary Practice, 72 Lowry Street Rochester 3561, Phone (03) 54842255 admin@rochyvet.com.au

Heat Stress in Cattle

Heat stress in cattle occurs when they are exposed to environmental temperatures greater than 25°C, in combination with high humidity or direct sunlight. If cows are experiencing heat stress, they will actively seek shade and wet areas. Some cows will be agitated and breathe with an open mouth as their core temperature increases. Severely heat affected cattle (temperature exceeds 41°C), show signs of frothing from nostril and mouth which can be indicative of pulmonary oedema, wobbly gait and eventually collapse, convulse and die.

Over conditioned cows, sick cows and cows that experience milk fever are more vulnerable to heat stress.

Longer term effects of heat stress include:

- Reduced milk production by 10 - 20%
- Elevated Somatic Cell Count
- Reduced feed intake
- Higher risk of mastitis (due to wallow in water and muddy conditions leading to contamination of the udder and teats)
- Impaired reproductive performance (reduced expression of oestrus, reduced oocyte quality, reduced conception rates, increased embryonic deaths (increased losses up to day 90))
- Increased risk of lameness due to laminitis and poor hoof horn growth
- Cows can produce lower quality colostrum
- Reduced birth weight of calves

Animals experiencing heat stress need to be cooled down using fans and/or cold water over the body. Some animals may benefit from being stomach tubed with cool water.

Some tips that help prevent cows from experiencing heat stress:

- Provide plenty of water
- Provide plenty of shade (trees or sheds)
- Use water sprinklers and/or fans at milking
- Put cows on the yards under sprinklers during the hottest part of the day
- Adjust milking times to avoid the warmer period of the day- earlier morning and later evening milkings
- In situations where mixed ration based on conserved forage is available, it is best to feed this under shade during the day and have pasture grazed at night.