

# Managing Heat Stress in Dry Cows

Dry cows tends to withstand higher temperatures and generate less metabolic heat compared to lactating cows. **HOWEVER**, recent research studies have shown heat stress during pregnancy can have significant costs on calf health and their success in the herd later in life (Tao & Dahl, 2013).

## Effects on the dry cows



Drop in milk yield- >5l less than cooling dry cows

This is due to the compromised blood flow through the udder over the last couple of months leading to pregnancy. This in turn stunts udder growth further reducing the number of mammary cells supporting milk production. Not reversible in the same lactation but able to reverse in the next consecutive milking.



Give birth to calves with reduced performance and health

These heat stressed pregnant cows have smaller placentas with compromised blood flow through the uterus and umbilical cord. This results in a reduced gestation period.



Lowered immune status and increased prevalence of diseases

With heat stressed cows, neutrophil (white blood cells that form the first line of defence against pathogens) activity become less responsive. Therefore cows are more exposed to metabolic problems such as mastitis and retained foetal membrane.

## Effects on calves



Reduced birth body weight and height to weaning

Although there is no change in colostrum antibodies (IgG) within heat stress cows –a calf's ability to take up these antibodies are greatly reduced when heat stressed in utero. Thus, their immune function is compromised. Therefore down the track, these calves are more prone to infections pre weaning. This can have flow on effects such as lower growth and higher mortality rates.



Less productive in first lactation and further

## Effects on heifers



Maiden heifers less fertile

If dam is heat stressed during pregnancy. The heifer born will have a consecutive drop in production AND find it more difficult to get back in calf.

Don't waste the opportunity to achieve genetic potential. Implement a better heat stress program for your dry cows.

Contact us to discuss effective nutritive products that could help manage heat during summer.

