

Nutritional challenges of the heat stressed cow

- Compromised DMI
- Breakdown of tissue protein
- Loss of minerals
- Acidosis
- Leaky gut
- Inability to mobilize body fat

When heat stress causes the THI index to reach 68 it affects:

- Lying times
- Milk production
- Milk quality
- Hoof health
- Reproduction
- Rumen pH and gut health
- Transition health

Macro mineral recommendations

- Free access salt and sodium bicarbonate are essential for rumen buffering
- Increase macro mineral inclusion rates in line with the decrease in DMI
- Prevent low DCAB – feeding sodium sesquinate can be an option
- Consider K supplementation when feeding low levels of forage and increased levels of concentrates

Trace mineral recommendations



Zinpro® Availa® Dairy
Protects against leaky gut and boosts the immune system

Zinpro® Availa® Se
Controls oxidative stress



Consider these feed additives:

Methionine
Enhance liver function

Glucose precursors
Increase glucose supply

Niacin*
Increase peripheral blood flow

Yeast
Rumen stability

* May reduce blood flow to the intestine and affect gut health

Increase the energy density to compensate for lower DMI and to reduce rumen heat production

- Supplementary rumen protected fat or C16
- Reduce fibre content of the diet – replace with digestible fibre, starch or sugar
- The minimum NDF level is 28% and ADF level of 17% in HS conditions
- Always consider the effects of dietary changes on rumen health

Increase the supply of protein to the small intestine

- Increase protein supply with protected amino acids and protein
- This will help to reduce blood urea, improve liver function and reduce energy loss

Keep the TMR fresh

- Calcium propionate can prevent heating in the TMR and boost intakes

Water, Water, Water

- Water requirements nearly double when the environmental temperature increases from 20° to 35° C
- Avoid offering water from heat exchangers

