

HEAT STRESS

in poultry

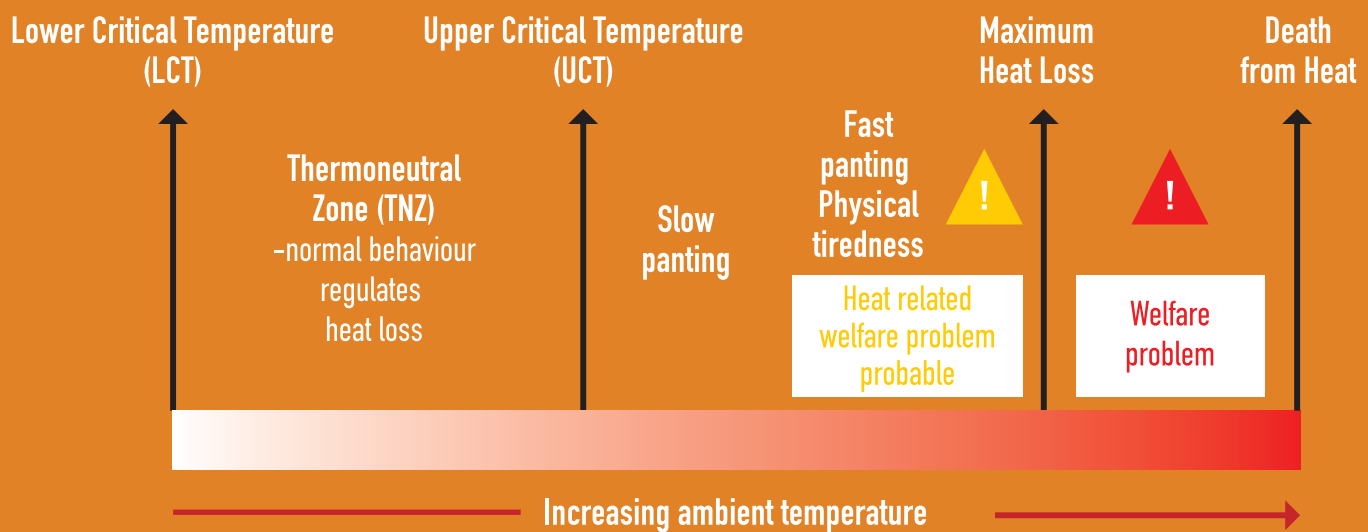


Heat Stress:

Difficulty in achieving a balance between body heat production and body heat loss. It can occur at all ages and types of poultry. Climate change makes the challenge of heat stress more difficult to manage.

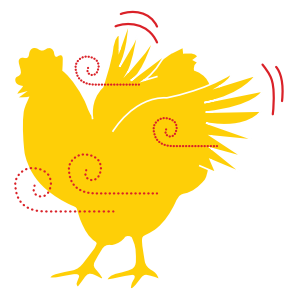
As a result of heat stress, several physiological adaptations occur such as blood flow redirection, immune system stimulation and hormones secretion resulting in compromising growth.

Negative effects associated with heat stress include:



Signs of Heat Stress

- Panting & rapid breathing
- Reduced feed and water intake
- Lethargic behavior
- Staggering, Disorientation and Seizures



Management, housing conditions and nutrition can influence birds response to heat stress and improve health, welfare and overall performance.

Housing conditions & Management practices

- Ventilation system → optimal air circulation
- Use of evaporative cooling pads
- Stocking density
- Supply of fresh, cool water
- Insulation in poultry houses
- Feed and water management during day



Nutrition

- Higher energy density diet
- Increased inclusion of high quality fat
- Increased digestible amino acid levels
- Optimized digestibility of feed by using selected additives such as phytogenics, probiotics, vitamin C, betaine
- Antioxidants such as Vitamin E as well as natural antioxidants
- Pelleted feed
- Dietary electrolyte balance