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ADAPTIVE PHYSIOLOGICAL AND BIOCHEMICAL RESPONSES OF DAIRY ANIMALS TO HEAT STRESS: A REVIEW

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ABSTRACT

Stress is reaction of body to stimuli that disturb homeostasis and adversely affects the animal body system. To cope up such situation animal body shows many neuro-endocrine responses which may alter the biochemical reactions to acclimatize to its surrounding. Heat stress is important phenomenon among dairy farmers due to its deleterious effect on productivity of animal and so economy of farmers. Animal's responses to atmospheric temperature above thermoregulatory critical limits are indicative of animal's adaptation. However, when homeostasis mechanism is not quite enough for thermal adjustment, animal undergoes a critical condition. Better manage-mental practices can assist to minimise heat stress on animal body and to maximize its productivity.

KEYWORDS: Heat Stress, Homeotherms, Panting, Thermoregulation