The heat is on: how to battle heat stress during summer days

As the mercury rises in most of the Northern Hemisphere, we see people all struggling to keep cool. Unfortunately for animals, the luxury of air conditioning is one which they cannot afford.

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Poultry, being plumed animals, struggle to release heat from their bodies when environmental temperatures exceed their thermoneutral zones.

Animals, housed in enclosed farm buildings with a high stocking density, are also highly susceptible to heat stress during these warm summer days.

Animals that experience heat stress attempt to compensate by eating and moving less, drinking more, and of course, panting and sweating.

These behaviours naturally have a negative impact on growth, and lead not only to an increase in the feed conversion rate, but also have an adverse effect on animal welfare.

Oxidative stress

Apart from eliciting heat stress modulating behaviours, prolonged heat stress also causes oxidative stress. This is due to the generation of reactive oxygen and nitrogen species by the bodily cells as well as a reduction in the natural antioxidant system's functioning.

This eventually causes a build-up of dangerous free radicals, leading to oxidative stress and subsequent damage to not only the important bodily cells, but also the immune system of the chickens.

This results in lowered performance, and higher susceptibility to diseases due to the reduced integrity of the immune system.

To battle the negative effects of heat stress, a combined approach needs to be taken. Intra Aerosol, with its active essential oil components, produces an external cooling effect for the animals under heat stress.

This is due to the menthol component of the formulation that triggers cooling receptors in the nasal and oral mucosa, thereby giving a soothing and cooling

sensation when misted or consumed in the drinking water.

As heat stress results in significant oxidative stress, a powerful antioxidant should be used. This is to ensure that free radicals are scavenged and prevent them from continuing to damage important bodily cells and functions.

Therefore, the internal solution for reducing the negative effects of oxidative stress comes in the form of Intra Mineral Selenium Vitamin E.

It is a premium blend of high quality, well emulsified vitamin E with organic selenium, ensuring not only high bioavailability of the ingredients but also excellent miscibility in water without encouraging biofilm formation.

In conclusion, a combination of Intra Aerosol and Intra Mineral Selenium Vitamin E is an optimal solution to prevent the negative effects of heat stress in poultry under the influence of seasonal temperatures. ■