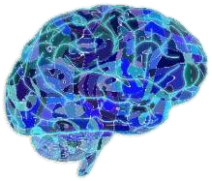
PHYTOZEN® LIQUID

PHYTOZEN® LIQUID IS INDICATED TO PROMOTE POSITIVE AND RELAXED BEHAVIOR IN SWINE, CHICKENS AND TURKEYS DURING PERIODS OF STRESS ASSOCIATED WITH TEMPERATURE CHANGE, TRANSPORT/ANIMAL MOVEMENT, VACCINATION AND DIET TRANSITION

VETPHARM

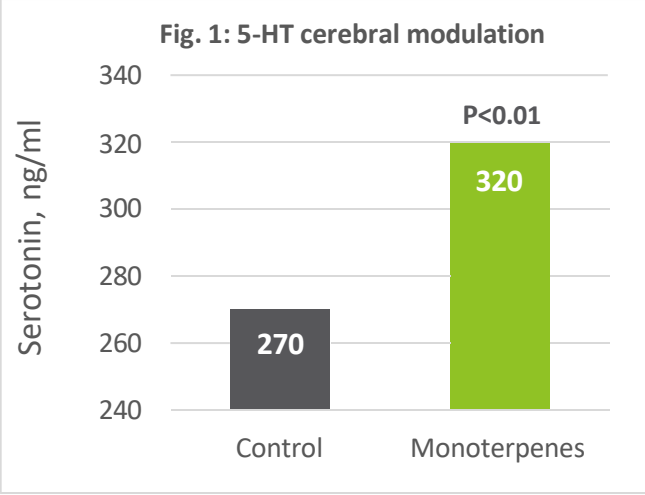
Stress mitigation in poultry operations, a winning strategy for everyone…

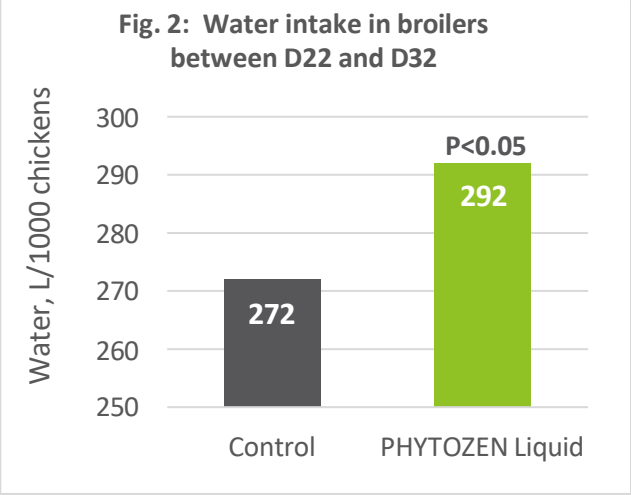
Stress has long been recognized to have deleterious effects on animal' health, productivity and well-being (Virden & Kidd, 2009). Consequently, producers opt for some farming managments to limit various stress factors (avoidable: feed quality, overcrowding), whereas other factors inevitably cause occasional or chronic stress (inevitable: heat wave, handling) as summarized by Jag Mohan (2006).



Probiotech International Inc. developed a unique formula based on essential oils (rich in monoterpenes), spices, magnesium and vitamin C. All of these ingredients are known to regulate brain perception of stress (Coquery et *al.*, 2019), their anxiolytic effect (Pervenn et *al.*, 2009) as well as their thermoregulatory action (Wen et *al*., 2020).

Studies with some of the natural compounds formulated in PHYTOZEN® LIQUID have shown an increase in brain serotonin levels (safe and appeasement neurotransmitter) (Fig. 1) (Perveen et *al.*, 2009). Furthermore, PHYTOZEN® LIQUID promotes water consumption in chicken during heat stress (Fig. 2).





Références:

Virden et Kidd, 2009 - Physiological stress in broilers: ramifications on nutrient digestibility and responses. J. Appl. Poult. Res. 18: 338-347

Jag Mohan (2006) - Thrust Areas for Mitigation of Stress in poultry. In Poultry Research Priorities to 2020. P.V.K. Sasidhar (Ed.). Proceedings of National Seminar of CARI (India), pp 147-151

Coquery et *al.*, 2019 – fMRI-based brain responses to olfactory stimulation with two putatively orexigenic functional food ingredients at two different concentrations in the pig model. J. Of Food Science. Vol 0, Iss

Perveen et *al.*, 2009 - Repeated administration of *N. Sativa* decreases 5-HT turnover and produces anxiolytic effects in rats. Pak. J. Pharm. Sci. Vol 22, No.2, pp 139-144.

Wen et al., 2020 – Effects of gingerol-rich extract ginger on growth performance, serum metabolites, meat quality and antioxidant activity of heat-stressed broilers. J. of Thermal Biology 89, 102544 pp 1-6

Usage recommendations in POULTRY production:

Broiler chickens (10 days before slaughter):
During heat stress periods.
To reduce condemnation at slaughter.
For heavy broilers, to minimize mortality at the end of the finisher period.
To reduce the stress of loading broilers into crates and transported to the slaughter plant.

Pullets and laying hens:
During heat stress periods.
During periods of pullet vaccination (3 days before-7 days post injection).
To prepare and aid the transition of the pullets to the production barns.
To decrease aggressive or nervous behaviours in birds.

Breeders:
During heat stress periods.
During feed restriction.
To limit the aggressive behavior of males during production.
To limit the impact of stress on reproduction behaviour and performance.

Turkeys:
During heat stress periods.
To limit aggression, cannibalism and nervous behavior.
To reduce stress when moving birds to new barns.
To limit the aggressive behavior of males (after 12 weeks of age).
To reduce condemnation at slaughter, starting at 14 days before slaughter.

Directions for use

Add **200 ml of** PHYTOZEN® LIQUID **per 1000 L** of drinking water. Prepare a stock solution of 500 ml (2 cups) of PHYTOZEN® LIQUID in 25 L of water. Then, use at a 1% dilution rate.

Use continuously during the stress period.

Allow 24 to 48 hours to observe the most significant effect on birds' behavior.

No negative interaction with chlorine, acidifiers and antibiotics present in drinking water.

Before using, ensure lines are clean and disinfected as well as the quality of the pipe (HDPE) in contact with the stock solution.

Shelf life: 24 months from the manufacturing date.

Net weight: 4 kg jug
Veterinary Health Product **NN.E1U9**

PROBIOTECH INTERNATIONAL

www.probiotech.com
info@probiotech.com
6225 boul. Choquette
Saint-Hyacinthe QC J2S 8L2 CANADA

1 800 267-7252

MADE IN EUROPE

VETPHARM