



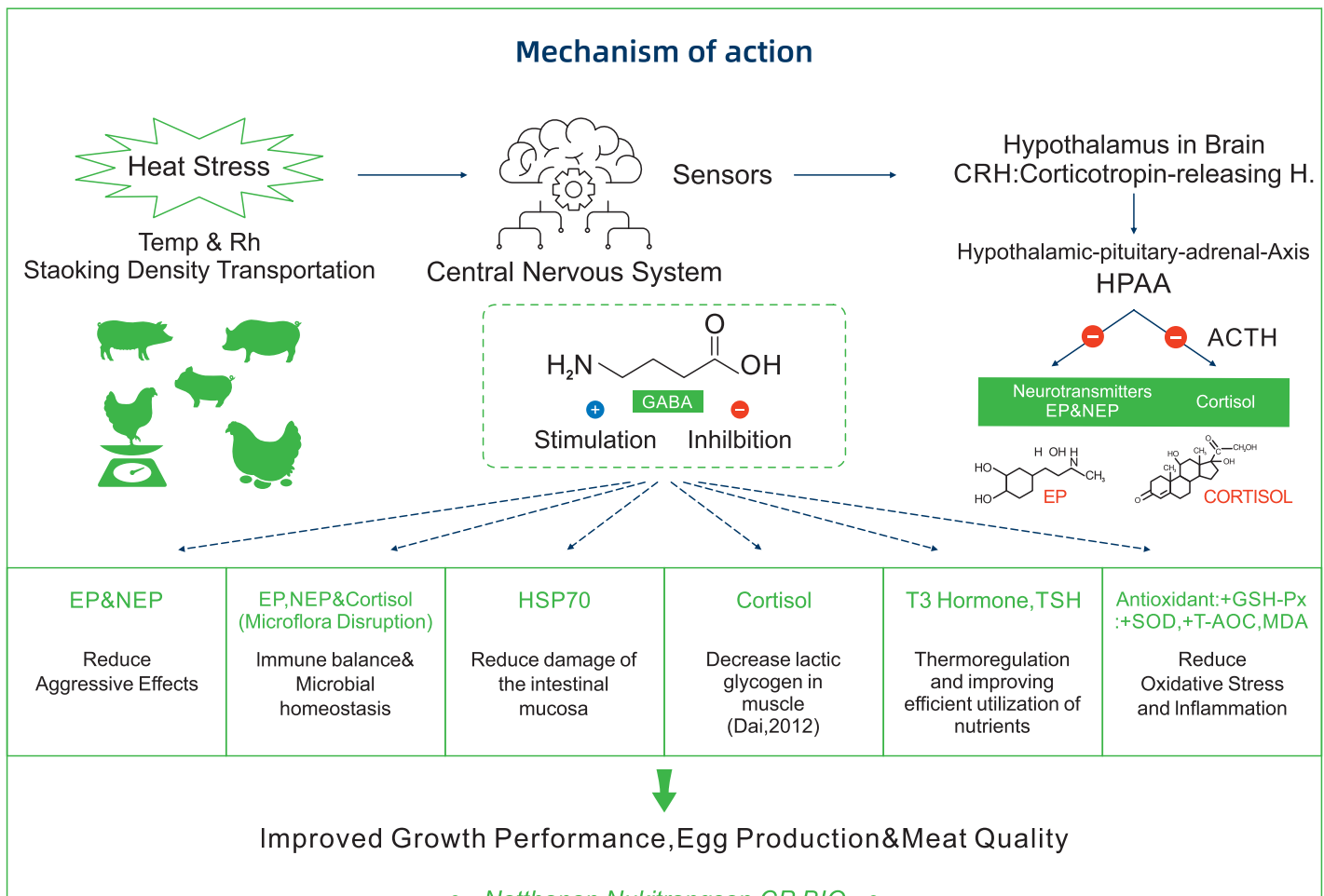
# Amino-GABA

For Stress Challenges and Meat/Egg quality

## Gamma-aminobutyric acid (GABA)

Generally recognized as safe feed additive, is a four-carbon non-protein amino acid that acts as a primary inhibitory neurotransmitter in the central nervous system of animals and has been known to possess antioxidant, anti-stress and immune modulating properties.

“Amino-GABA’s production by CP BIO is all natural and safe, and the appearance is granular with good fluidity, no agglomeration.



### Benefits

- 1 • Enhance stress tolerance (heat, cold, transport, stocking density, weaning, trimming...)
- 2 • Improve meat/egg quality
- 3 • Improve feed intake and feed efficiency
- 4 • Improve immunity
- 5 • Reduce aggressive behavior



## Trial in layers

Egg production **+3.6 %**

Egg weight **+7.3 %**

Feed/Egg ratio **-0.18**



Egg quality Significantly increased  
(Data source: Park et al., 2016)

Target animals	Amino-GABA (20%)	Amino-GABA (50%)
	Dosage (g / ton of feed)	
Piglets	200-300	80-120
Pigs/Sows	300-400	120-160
Chickens	200-300	80-120
Aquatic animals	100-200	40-80
Cattle	500	200
Sheep	300	120

## Research in animal species

	Reduced Heat Stress in Chicken — (Chen et al., 2013)
	Reduced Stress under Beak Trimming — (Xie et al., 2013)
	Growth Promotion for Lambs — (Wang et al. 2015)
	Improved Egg Production and Quality — (Park et al., 2016)
	Improved Growth of Grass Carp — (Fan et al., 2016)
	Reduced Stress and Improved Growth of Pacific White Shrimp — (Xie et al., 2017)
	Reduced Heat Stress In Beef Cattle — (Guo K., et al., 2018)
	Improved Gut Health for Weaning Piglets — (Chen et al., 2019)
	Improve Growth of Cuttlefish — (Li et al., 2020)
	Reduced Transportation Stress of Pigs — (Bi et al. 2020)