



RE *S* **ERGEN**

THE MAGIC OF ANTI-OXIDANT

For the last three decades poultry production worldwide has made tremendous progress in terms of quantity and quality of meat and egg production, including improvement of growth rate and FCR. However, it has been proven that commercial poultry production is associated with a range of stresses including environmental, technological, nutritional, and internal/biological. Indeed, it is practically impossible to avoid stresses, so therefore overproduction of free radicals and oxidative stress are very common problems in commercial poultry production. In order to stabilize the oxidative stress, the antioxidants like vitamin E, beta-carotene, carotenoids, minerals (selenium and manganese) and some of the bioactives like flavonoids, phenols, polyphenols are found to be used in animal feed.



✓ **RESERVEN** has polyphenolic phytoalexin compound i.e., Resveratrol, which is produced naturally by some berries in response to harmful factors such as attack by pathogens or increased oxidative stress. It is abundantly present in fruits like mulberry, black currant, blueberries, American lingonberries, strawberries, raspberries, apples and peanuts. It possesses beneficial properties such as antioxidants, cardiovascular effects and also as anti-inflammatory effects. It has the ability to reduce excessive fat accumulation in adipose tissue (Delmas et al., 2011) and helps in reducing lipid peroxidation. Since resveratrol is a polyphenol compound, it is unstable and less bio-available to animals. For this reason, we have **RESERVET** (patented technology) which is composed of resveratrol along with arginine in order to increase its bioavailability and stability.

✓ Vitamin E is one of the most effective nutrients known to modulate immune function, Membrane integrity, Inflammation, Signal transduction, and Cell cycle division, which are sensitive to oxidative stress. It is generally recognized that the scavenging of reactive oxygen species and reduction of oxidative stress plays a key role in maintaining the immune system. Vitamin E is a major chain-breaking antioxidant and an important lipid component of biological membranes. It protects the liver from lipid peroxidation and cell membrane damage (Whitehead et al., 1998; Sahin and Kucuk, 2001). It also increases egg productivity by preventing liver damage, which is important for egg yolk protein synthesis (Yardibi and Türkay, 2008).

✓ Selenium (Se) is one of the essential trace elements required in poultry nutrition. It is proven to play a vital role in the antioxidant defence mechanism of the body. Selenium is the cofactor for the enzyme glutathione peroxidase which catalyzes the removal of peroxides, thus important in the prevention of oxidative stress. It has a role in improving reproductive health too.

✓ Plant extracts especially essential oils were used in broiler nutrition since they have effects on broiler performance. Anise oil has anti-parasitic, digestion-stimulating properties, Antibacterial, Antifungal, Antioxidant, Antimicrobial and Anthelmintic activities. In order to counteract free radical production one needs to use effective anti-oxidants for better production. Considering this, QUADRAGEN comes with a blend of potent anti-oxidants i.e., **RESERVEN** after successful R&D.



INDICATIONS

Recommended in day old chicks for a week to stimulate CMI

Use for 2 days, pre & post vaccination

During outbreak of viral & bacterial diseases (IBD, IBH, ND, CRD, Coryza etc.)

During chronic & acute Mycotoxicosis

For improving fertility & hatchability

Post antibiotic therapy

Continuous usage in the feed in challenged farms for better immunity

COMPOSITION

Each 100 g contains:

Vitamin- E

Enhanced with
**Reservet &
Essential oil**

Selenium

BENEFITS

- **Reservet** along with immunogenic **Essential oil 'A'** stimulates innate immunity and protects immunocytes against antigen-induced apoptosis
- Improves immune response & potentiates cell mediated immunity
- Thermostable & safe at pelleting temperature
- Water soluble
- *Layers* : Improves egg production
Improves the vitamin E & selenium concentration in the table eggs
- *Breeders* : Improves egg production & hatchability
- *Broilers* : Better immunity against recurrent infections

USAGE

CHICKS/GROWERS BROILERS/LAYERS	BREEDERS	FEED
1 g/ 5 L of drinking water	1g/ 2 L of drinking water	100 - 200 g/ton of feed

PACKING
200g



QUADRAGEN VETHEALTH PRIVATE LIMITED

No. 1/1, 1st floor, 'Akka complex', 14th Cross, 5th Main, R.M.V 2nd stage,
Dollars Colony, Bengaluru - 560 094, KARNATAKA, INDIA

Phone: +91-80-2341 0440

Email: technical@quadravet.com

marketing@quadravet.com

www.quadravet.com