





# What are NANOEMULSIONs?

Nano-emulsions are a group of dispersed particles used for pharmaceutical and biomedical aids. that show great promise for the future of cosmetics, diagnostics, drug therapies and biotechnologies. Nano-emulsions can be defined as oil-in-water (o/w) emulsions with mean droplet diameters ranging from 50 to 1000 nm. Usually, the average droplet size is between 100 and 500 nm. The particles can exist as water-in-oil and oil-in-water forms, where the core of the particle is either water or oil, respectively. The terms sub-micron emulsion (SME) and mini-emulsion are used as synonyms. Usually, SMEs contain 10 to 20 per cent oil stabilized with 0.5 to 2 per cent egg or soybean lecithin.

# Mode of Action

# Nano-Selenium(SeNPs) Supplementation

Nano-selenium particles smaller than 100 nm have greater antioxidant activity than larger particles. Nano-Se particles of size 5-200 nm can directly scavenge free radicals in vitro depending on their size. Selenium is an essential trace mineral whose principal function is to inhibit the oxidation of lipids (fats). Vitamin E is most effective chain breaking lipid-soluble natural anti-oxidant. Especially Selenium combined with Vitamin E act synergistically to aid in the production of antibodies and help maintain a healthy heart and liver. Vit. C possesses significant anti-oxidant activity. Vit.C deactivates free radicals directly in the cell. Boitin prevent fatty liver and kidney syndrome, improves growth rates.

# Why we should use Nanoemulsions?

Nanoemulsions have a much higher surface area and free energy than macroemulsions that make them an effective transport system. Nanoemulsions do not show the problems of inherent creaming, flocculation, coalescence and sedimentation, which are commonly associated with macroemulsions. Nanoemulsions represents an important potential to improve the bioavailability of supplements with the possibility of modifying their properties, such as resistance to adverse pH, digestion, and enzymatic cleavage.

WIT THE THE

### Composition per litre solution:

Nano-Selenium : 200 mg Nano Vitamin E : 4000 mg Nano Vitamin C : 8000 mg

(encapsulated in liposomes made from

essential Phospholipids)

Vitamin B1 : 800 mg
Vitamin B2 : 2200 mg
Vitamin B6 : 2800 mg
Vitamin B12 : 30 mg
Niacinamide : 9000 mg
Calcium pantothenate:1600 mg
Biotin : 450 mg

Folic acid : 600 mg

Digestible amino acids from spirulina.

#### BENEFITS:

Stimulates antioxidant Glutathione peroxidase and Thioredoxin reductase enzyme system, provides a buffer against potential damage from free radicals. Optimizes functioning of immune system; especially recommended after viral infection and before vaccination plan.

Improve weight of bursa, spleen and thymus.

Significantly influence carbohydrate metabolism, fatty acid synthesis, protein synthesis, amino acid deamination and nucleic acid metabolism.

Protects the muscle fibres and blood vessels. Stimulate muscle metabolism; prevents white muscle disease (WMD). Improves viteline membrane strength of embryo. Improves egg production, growth, fertility and hatchability



# Nano emulsion fortified with Nano Vitamin E, Vitamin B-Complex, Nano Vitamin C & Biotin. TRUESEL NEs

# Improves fertility and hatchability in breeders and prevent reproductive disorders

**TruèSel~NEs** protects fatty acids from oxidizing. Essential fatty acids can easily oxidize and become rancid. Sperms are mainly composed of essential fatty acids.

**TruèSel~NEs** has protective and beneficial effects on semen quality. **TruèSel~NEs** is also needed for production of testosterone. Better hatchability of the eggs and survival rate in chicks.

**TruèSel~NEs** affect reproductive maturity and growth performance of fishes and also farm animals.

# Improves egg, meat and milk quality

Improve egg production and meet freshness and shelf-life. Increase Se content of muscle as much as 2.5 times, improve meet tenderness and increase colouration in the meet enhancing appeal. Increase in natural selenium content of the milk and lower natural somatic cell count (SCC) in the milk.

# Subsequent reduction in Oxidative stress in the animal leading to following welfare.

**Poultry:** Prevent diseases like Exudative diathesis (accumulation of fluid throughout the body, particularly in abdomen and feet), Nutritional muscular dystrophy, poor performance, pancreatic atrophy, encephalomalacia (Crazy chick disease),

Minimises Gangrenous Dermatitis (Wing rot), Reduce acute death syndrome. Improves weight of bursa, spleen and thymus. Improve performance in high temperatures & high stocking density. Cattle: Prevent White Muscle Disease (WMD), retained placenta, cystic ovarian disease, dystocia and anaemia, insufficient weight. Swine: Prevent Hepatosis dietetic (degeneration of the liver), mulberry heart disease, nutritional muscular dystrophy. Pigs are more susceptible to swine dysentery when selenium deficient.

A Product of :



TRÈSBIEN BioSynth Pvt. Ltd.

B-204, 2nd Floor, Turning Point, C.H.S. Ltd. Sector-1, Vasant Nagri, Vasai (East), PIN: 401208, Mumbai, INDIA

Email: admin@tresbienbiosynth.com Web: www.tresbienbiosynth.com

Customer Care No: +91 7900171425



EURO Certification (UK)Ltd.





POULTRY



BEEF & DAIRY

**SWINE & PIGLET** 

# **Dosage And Target Species:**

Poultry, swine, cattle, sheep & goats: 0.5 to 1 ml/ litre of drinking water for 5-7 days.

Chicks: 2.5 ml/100 birds Broiler: 10 ml/100 birds.

Layer & Grower: 2.5ml/100 birds.
Laying hens: 0.5ml/ litre of drinking

water for 5-7 days.

Or as directed by the Veterinary

Practitioner.

**Instruction for Use:** Oral route in drinking water. Shake well before use.

Appearance: A clear yellowish solution, slightly viscous with a characteristic odour.

**Shelf Life and Storage** 

Condition: 36 months from Date of Production. Store in original packing in a cool dry place, protect from light.

Packing: 1 Litre & 5 Litre HDPE

sottle.

Warning(s) Not for human use. Keep out of the reach of children.



