

Bio-Surf[®] Powder

Higher Performance with higher utilization of Fat & Oil

Product Description:

Biosurf[®] is a unique combination of hydrolysed Lecithins (Lysophospholipids, Phosphatylcholine, Trimethylglycine (TMG), Organicphosphorus), Bio-surfactants, Active polypeptides, Methyl donors, Gut stabilizers in fortified activated base.

Composition:

Each 1000 gm Biosurf[®] powder contains:

- Hydrolysed Lecithins:
 - *Lyso – Phospholipids* : 20 gms
 - *Phosphatidyl Choline* : 33 gms
 - *Tri-methyle Glycine* : 5 gms
 - *Organic Phosphorus* : 7.6 gms
- Active Polypeptides : 10.2 gms
- Methylene Donars : 38 gms
- Gut Stabilizers : 2 gms
- Base: Calcium Carbonate : qs

Mechanism of Action:

❖ Lyso – Phospholipids:

It increases the activity of emulsifiers.

❖ Phosphatidylcholine (PC):

This has much fluidizing effect on cellular membrane integrity and repair impaired cell membranes. PC seems to be particularly beneficial to the liver. In clinical studies, PC helped with liver cirrhosis, viral liver damage, and drug-induced liver damage. Choline is a building block of another chemical, acetylcholine that actually carries messages between nerve cells. The brain uses acetylcholine for many purposes, including controlling memory, heart rate, and sweating. PC is also metabolized to choline, fatty acid and glycerol. The fatty acid and glycerol either get oxidized to produce energy or become involved in lipogenesis.

❖ Methyl donor:

Scientists suspect that adequate methylation of DNA can prevent the expression of harmful genes. Methyl donors help in the production of several brain chemicals & hence improve mood, energy, wellbeing, alertness, concentration, and visual clarity.

❖ Tri-Methyl Glycine (Betaine): (3CH₃+Glycine)

It reduces the harmful homocystine level in blood.

❖ Organic Phosphorus:

In enzymatic reaction, Phosphate radical separated and formed ADP and ATP, which is a source of energy.

❖ Active Polypeptides:

A protein moiety (in higher molecular weight & complex structure) which stimulate lipase activity for better fat emulsification.

❖ Gut Stabilizer:

Short chain fatty acid i.e. butyric acid which maximize the expression & activation of native gut enzymes to tackle the food substrates for better degradability & absorption. Physiologically Butyric acid stimulates more production of bile, thereby increasing biosurfactant activity.

Indication:

For digestibility of fat and availability of energy as it acts as natural emulsifier and improves absorption of fat soluble vitamins and other nutrients.

Dosage & Administration:

Broiler : 500 gm – 1 Kg per Ton of Feed continue.

Layer : 250 – 500 gm per Ton of Feed continues.

Fish : 500 gm – 1 Kg per Ton of Feed continue.

Or, as directed by Veterinarian / Fishery consultant.

Safety Margin:

Five times the recommended dose was found to be safe and well tolerated by the livestock and poultry.

Supply: 1 Kg & 20 Kg.