

## JubiDOL<sup>®</sup>

A natural emulsifier for digestion of lipids





- Developed by Jubilant R&D, Jubidol<sup>®</sup> is a natural emulsifier for digestion of lipids
- Jubidol® forms a stable Oil in water emulsion inside gut to prepare for fat digestion by Lipase enzyme by Ideal HLB of 8-12 (1) & High LPC content of 1.8%-2.2% (1)
- Lower CMC (Critical Micelle Concentration) 0.02-0.2 mmol/l (1) for better fat absorption through uniform micelle formation
- 2% ME savings to the customer proven by trials done at TILMA Gurgaon, 2013 (2)
- Jubidol® Emulsicheck kit for Live demonstration of Emulsification



- Jubidol® is a natural emulsifier for digestion of lipids: Developed through enzymatic hydrolysis ensuring optimal blend of lysophospholipids & phospholipids by Jubilant R&D
- Forms a stable Oil in water emulsion inside gut to prepare for fat digestion by Lipase enzyme by
  - a) Ideal **HLB of 8-12** (1) (which makes it more polar thus ideal for emulsification of fat in poultry intestine)
  - b) **High LPC (1) content** of 1.8%-2.2% (Higher concentration of lysophospholipids (LPC- 2.2%) ensures lower dosage than conventional emulsifiers & better lipid digestion)



- a) Lysophospholipids in Jubidol have even lower CMC than bile salts and hence are required in less quantity than bile to emulsify same amount of lipid
- 20-200 times more effective than bile & 10-15 times more than lecithin

| HLB &                | emulsifiers i                   | n water/oil         |
|----------------------|---------------------------------|---------------------|
|                      | Oil                             | N ACK               |
| do do                |                                 | 10.000              |
| 000                  | Water                           |                     |
| Strongly hydrophilic | Good balance<br>appropriate HLB | Strongly Lipophilic |

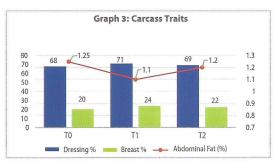
Reference: www.rikrnvitamin.com/foodingredients/emulsifier/properties.html

| Agent                    | CMC (mM/L) |
|--------------------------|------------|
| Deoxycholate (bile salt) | 4          |
| Lysophosphotidylcholine  | 0.02-0.2   |
| Lecithin                 | 0.3-2      |

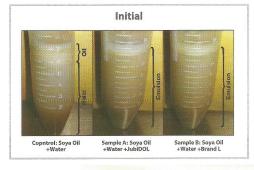
\*Ed G Zubay (1983); Langmuir, 2002

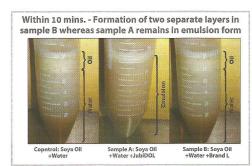
Better Body Weight Gain, Feed Intake, Feed Efficiency (EEF) and carcass traits improved along with reduction of 2% ME in diet after addition of Jubidol (2)





With the help of Live demonstration of Emulsification by Jubidol® Emulsicheck kit, we can establish the better efficacy of Jubidol® in proper digestion of lipids





**Emulsification Test: A Proof of better Emulsification Action** 

## **Recommended Inclusion Rate:**

250 gm/MT of feed or as recommended by nutritionist or consultant

Packing: 25 kg Bag

1. Jubilant's R&D

2. TRR-09-NPD-JubiDOL-001. A Performance Trial Conducted at Research Farm at Gurgaon

TM – Trademark of Jubilant Life Sciences

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