

# FRA<sup>®</sup> C12 Dry

- » Active in entire GIT and via bloodstream
- » Inhibits fat enveloped viruses
- » Inhibits gram-positive bacteria
- » Reduces mortality rate
- » Improves animal performance



**IMPROVE PERFORMANCE**

**REDUCE MORTALITY**

$\alpha$ -Monoglycerides

**FRA<sup>®</sup>**

Framelco HQ  
Ruisvoorn 5  
4941 SB Raamsdonksveer  
The Netherlands  
Tel. +31 (0) 880 443 300  
info@framelco.com  
framelco.com

# FRA<sup>®</sup> C12 Dry



## The Challenge

One of the main issues in poultry husbandry is efficient and sustainable animal production. Several factors such as raw material prices and increasing worldwide competition force farmers to optimize their production cycles. Moreover, farmers have to deal with animal welfare regulation, restriction of antibiotic usage and prevalence of infectious diseases.

When animals are subject to stress factors such as animal density, climate condition, type of housing or change of feed, they are highly susceptible to infectious diseases and (metabolic) disorders.

These diseases can be caused by gram-positive pathogenic bacteria like *Streptococci* or *Staphylococci*, and viral infections like IB or ND. Antibiotics and vaccination programs are commonly used, however, not all bacteria and viruses can be targeted due to economic and/or practical disadvantages.

Bacterial and viral infections may lead to decreased reproduction and growth performance, high mortality rates and lower profitability.

## Trial results

Results of Farm A	FRA <sup>®</sup> C12	Control 1	Control 2	Control 3
Final weight	2,00	1,78	1,92	1,86
FCR	1,68	1,85	1,86	1,86

Results of Farm B	FRA <sup>®</sup> C12	Control 1	Control 2	Control 3	Control 4	Control 5
Final weight	2,16	1,75	2,08	1,99	2,00	2,14
FCR	1,74	1,84	1,75	1,91	1,79	1,82

Results show that supplementation of FRA<sup>®</sup> C12 at 5 kg/ton of starter feed and 3 kg/ton of grower feed, improves final weight and FCR. Trials were performed at farms having problems with Running Stunting Syndrome.

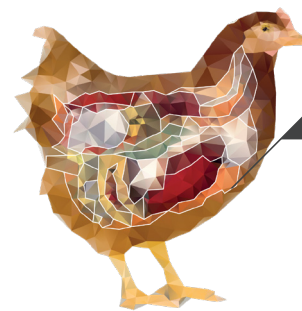
## The Solution

FRAmelco has developed FRA<sup>®</sup> C12: a specific formula containing medium chain 1-monoglycerides. Feeding this product to poultry reduces health problems and improves animal performance.

### » 1-Monoglycerides

Extensive research shows that medium chain 1-monoglycerides possess antibacterial, antiviral, and animal performance improving properties. FRA<sup>®</sup> C12 contains 1-monoglycerides of medium chain fatty acids to inhibit gram-positive pathogenic bacteria. Additionally, 1-monoglycerides of medium chain fatty acids deactivate fat enveloped viruses.

As a result of the unique mode of action, 1-monoglycerides are active in the entire gastrointestinal tract and blood stream. Pathogens do not develop resistance against 1-monoglycerides. It is suggested by literature that 1-monoglycerides may be used as an alternative for preventive use of antibiotics.



ACTIVE IN ENTIRE INTESTINAL TRACT AND BLOOD STREAM

### Characteristics

- Available in dry form
- Heat stable up to 160 °C
- Neutral taste and odour
- Non corrosive
- Active in GIT and blood stream
- pH independent
- Available in 25 kg bag, 1000 kg big bag and bulk
- Produced in GMP+ certified facilities

### Usage

Advised dosage is as follows:

- 1-5 kg FRA<sup>®</sup> C12 dry per ton of feed
- It is recommended to contact your local FRAmelco technical sales manager to determine a farm specific dose level
- Use continuously
- Apply via feed

Data of this flyer are based on our current knowledge and experience. As many factors during and after application may effect the performance of our product, processors are responsible for carrying out their own tests and investigations. Certain statements may not be applicable in all geographical regions. Product associated claims may differ based upon government requirements.

FRA<sup>®</sup>

Formulating Revolutionary Additives