

FRA[®] Butyrin Ultra Dry

- » Efficient target release of butyrate
- » Stimulates gut development
- » Non-smelling
- » Improves animal performance



GUT DEVELOPMENT

TARGET RELEASE

α -Monoglycerides

FRA[®]

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FRA[®] Butyrin Ultra Dry



Los datos de este folleto se basan en nuestra experiencia y nuestros conocimientos actuales. Dado que numerosos factores, durante y después de la aplicación, pueden influir en el rendimiento de nuestro producto, los procesadores serán responsables de llevar a cabo sus propias pruebas e investigaciones. Es posible que ciertas afirmaciones no se puedan aplicar en todas las regiones geográficas. Las reclamaciones relacionadas con el producto podrán diferir en función de los requisitos gubernamentales.

The Challenge

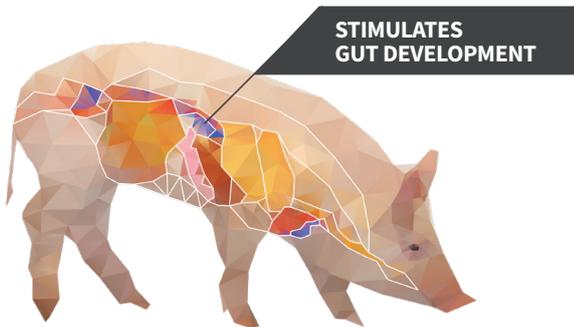
One of the main issues in swine husbandry is efficient and sustainable animal production. Several factors such as raw material prices and increasing worldwide competition force farmers to optimize their production cycles. Animal health is an important parameter for efficient production and is mainly determined by gut health.

A healthy well-developed gut is needed for efficient nutrient uptake to achieve sufficient growth and efficient FCR. Also, the intestines are the body's first immune defense barrier and therefore play an important role in the animal's resilience to invading pathogens.

However, due to a variety of stress factors such as pathogenic load, change of feed and social groups, especially in young animals the gut might be underdeveloped resulting in decreased digestion and immunity.

It is known that butyric acid is an effective energy source for the epithelium cells. Butyrate increases the length of the villi and small intestines, expanding the absorption area. However, butyric acid has a strong smell and is corrosive, making handling unpleasant.

Current coating techniques are not able to fully overcome the problem of smell, and show insufficient target delivery. Therefore, alternative butyrate additives are needed to stimulate gut development.



The Solution

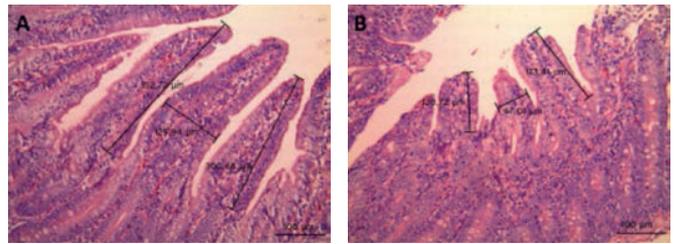
Framelco has developed FRA[®] Butyrin Ultra: a specific formula containing di- and triglycerides of butyrate and carefully selected micro-ingredients. Feeding this product to piglets, pigs and sows, stimulates gut development and improves animal performance.

» Di- and triglycerides of butyrate

The effect of butyric acid on gut development is intensively studied. Butyric acid serves as energy source for the epithelium cells and stimulates villi growth and length of the small intestines, resulting in more efficient uptake of nutrients and enhanced resistance against pathogens. Di- and triglycerides of butyrate are non-smelling and guarantee an effective target release of butyric acid in the gut.

» Micro-ingredients

Adding a small amount of carefully selected micro-ingredients induces a synergistic effect. These micro-ingredients contribute to the animal's resilience against invading pathogens.



Several stress factors, such as pathogen presence, can have a negative influence on gut health. This study clearly shows villi atrophy in pigs as a result of *E.coli* occurrence in the gut (picture B) compared to the control group (picture A) (Parra et al, 2011). It is known that butyric acid can be used to stimulate villi development and villi recovery to counteract these negative effects.

Characteristics

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

Usage

Advised dosage is as follows:

- 0.5-2kg FRA[®] Butyrin Ultra 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

FRA[®]

High achievers in feed additives