



FIBER AND ROLE OF MICROBIOTA IN PIGS



Dietary fiber, what are we talking about?

DEFINITION

Dietary fiber is a type of carbohydrate. It helps regulate digestion and maintain health

FUNCTIONS

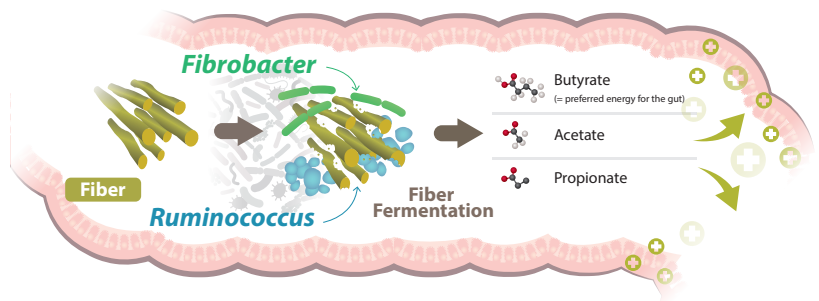
Substrate for gut microbiota, improve gut health and contribute to overall welfare

TYPES

Soluble and insoluble (e.g., cellulose)

1 What is the role of microbiota?

- The **bacteria** in the microbiota (e.g., *Fibrobacteres*, *Ruminococcus*) **contribute to breaking down fiber** and complex carbohydrates.
- Once broken down, fiber is fermented into **short-chain fatty acids (SCFAs)**
→ acetate, propionate, butyrate
- SCFAs are absorbed by large intestine epithelial cells, improving the feed utilization rate



2 What are the two types of dietary fiber?

SOLUBLE FIBER

- **Characteristics:** attract water, turn to gel, slowing digestion process
- **Benefits:** regulate nutrient absorption, decrease physical activity after feeding
- **Risk:** excessive soluble fiber can favor pathogen development, impacting growth performance

INSOLUBLE FIBER

- **Characteristics:** do not dissolve in water, add bulk to diet
- **Benefits:** help prevent digestive problems, produce SCFAs during fermentation, play an important role in gut health → slow energy release elements, improve glucose metabolism and appetite regulation

• It is crucial to balance the amount of both soluble and insoluble fiber in pig feed for optimal health.

3 How to improve the fiber fermentation process?

Levucell SB (*Saccharomyces cerevisiae* var. *boulardii* CNCM I-1079) is a **specific probiotic live yeast** dedicated to monogastric animals.

YELA PROSECURE, a **specifically designed hydrolyzed yeast**, is adapted to the modern challenges of piglets.

- ⊕ It stimulates and protects *Fibrobacteres*, which are key for fiber fermentation.

- ⊕ It provides functional dietary fiber, mostly insoluble, fueling microbiota.

• By understanding and supporting the fiber fermentation process, we can help maintain pigs' health and productivity.

LEARN MORE



Watch our Expert
Talk video!

