

## **Role of gastrointestinal microbes in the metabolism of nutrients and animal health**

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### **Abstract**

Gastrointestinal microorganisms are permanent residents in the gut of animals including humans. They have been reported to have great impact on nutrient metabolism, immune system, animal health and so on. In recent years, many studies have shown that gastrointestinal microbes are involved in the metabolism of nutrients in the gut, especially carbohydrates and protein. The microbial interaction in the process of nutrient metabolism has been investigated, including bacteria, fungi, and methanogens. Based on the community and function of gastrointestinal microorganisms, looking for nutritive strategies to improve the animal health has becoming important.

### **Brief Biography**

Prof. Yanfen Cheng is the PhD supervisor of National Center for International Research on Animal Gut Nutrition and College of Animal Science and Technology in Nanjing Agricultural University. Her research mainly focuses on gastrointestinal microbiota, especially ruminal microbiology and their role in the degradation of carbohydrates. In recent five years, she has published more than 15 SCI papers in reputational journal including *Bioresource Technology*, *Frontiers in Microbiology*, *BMC Microbiology*, et al.

### **Brief CV**

#### **Yanfen Cheng, Ph.D.**

Laboratory of Gastrointestinal Microbiology, Nanjing Agricultural University

#### **Education:**

B.S        Aquaculture, Nanjing Agricultural University, China, 2003

Ph.D.     Animal Nutrition, Nanjing Agricultural University, China, 2008

#### **Professional Career:**

2010-2012: Nanjing Agricultural University, China, Postdoc.

2012-2012: Nanjing Agricultural University, China, Lecture.

2013-2017: Nanjing Agricultural University, China, Associate Professor.

2018-Present: Nanjing Agricultural University, China, Professor

**Research Interests:**

1. Gastrointestinal microbiota
2. Rumen function
3. Microbial bioinformatics

**Selected publications**

1. Cheng, Y\*. et al. ***Bioresour Technol***, 2019, 290: 121796.
2. Cheng, Y\*. et al. ***Front Microbiol***, 2019, 10: 435.
3. Cheng, Y\*. et al. ***Anaerobe***, 2018, 50:1-8.
4. Cheng, Y\*. et al. ***World J Microbiol Biotechnol***, 2018, 34:155.
5. Cheng, Y\*. et al. ***Front Microbiol***, 2017, 8: 2165.