# Fibalance

## SOLUBLE PREBIOTIC FIBER

Partially Hydrolyzed Guar Gum

FSSC22000

**Rejuvenating The Gut**

Fibalance™ PHGG (Partially Hydrolyzed Guar Gum) is a premium soluble prebiotic fiber developed through ZymeBase' s cutting-edge green biotechnology.
Patent Application Number: PCT/CN2023/095287

MONASH UNIVERSITY LOW FODMAP CERTIFIED™

ZymeBase Fibalance™ PHGG (Partially Hydrolyzed Guar Gum) is Monash University Low FODMAP Certified™. The maximum recommended amount for low FODMAP formulations using this ingredient is 5g per serve size. Note: Products made using this ingredient must be tested and be part of the Monash University Low FODMAP certification program to claim to be Monash low FODMAP certified. Visit www.monashfodmap. com for further information.

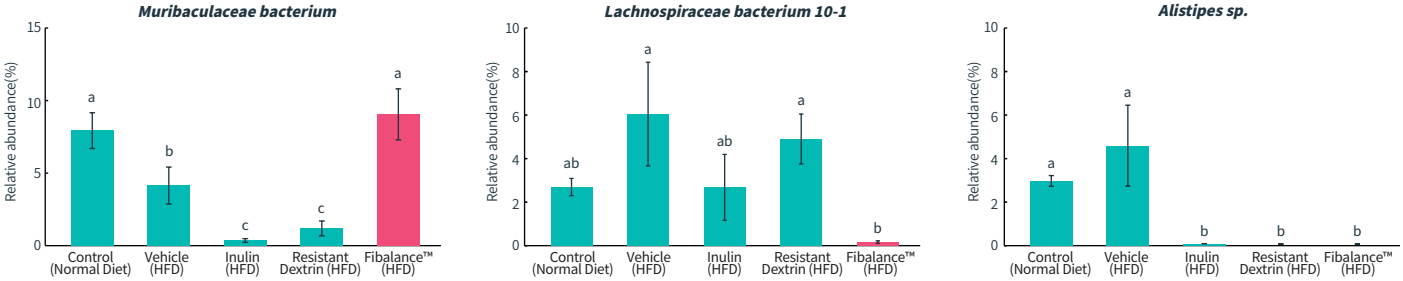
Monash University Low FODMAP Certified trade marks used under license by Zymebase Inc. A strict low FODMAP diet should not be commenced without supervision from a healthcare professional. A low FODMAP diet does not treat a disease but may help to meet nutritional needs with reduced gastrointestinal symptoms. Monash University receives a license fee for use of the Monash University Low FODMAP Certified trade marks.

# Physiological Characteristics of Fibalance™

- ***Natural & Gentle, Suitable For All Ages[1]***
- ***Bidirectional Regulation*[2]***
- ***Blood Sugar & Body Weight Management****
- ***Gut Microbiota Improvement****

The objective conclusion is based on experimental data and do not represent the product's efficacy.

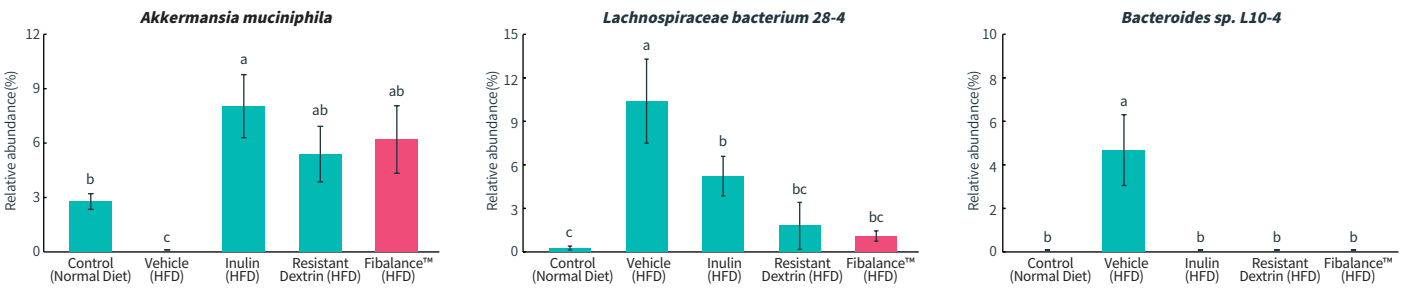
## Gut Microbiota Improvement




**Fibalance™ significantly increases the relative abundance of beneficial gut strains**

**Fibalance™ significantly decreases the relative abundance of obesity-related strains**

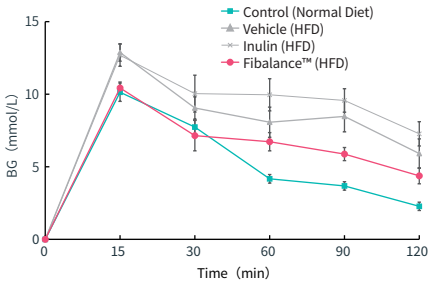
**Fibalance™ significantly suppresses the relative abundance of conditionally pathogenic strains**



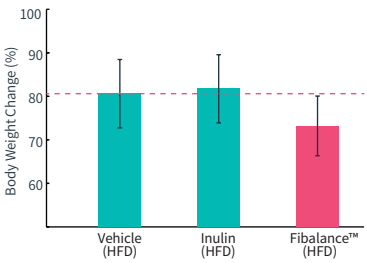

## Blood Sugar & Body Weight Management

HFD: High-fat diet

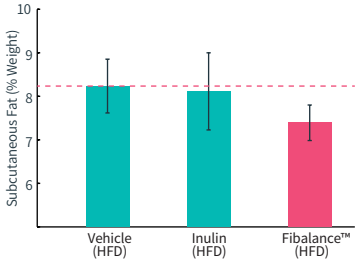
**Fibalance™ is significantly superior to inulin in controlling blood glucose levels**




**Fibalance™ slows down weight gain in objects with HFD**



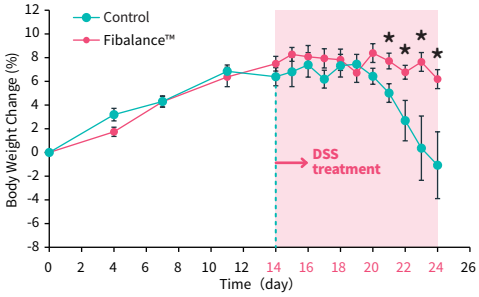

**Fibalance™ mitigates the subcutaneous fat accumulation in objects with HFD**




Note: If the content of this leaflet needs to be referenced, prior permission from ZymeBase is required, and both parties must sign a Authorization Agreement before use.

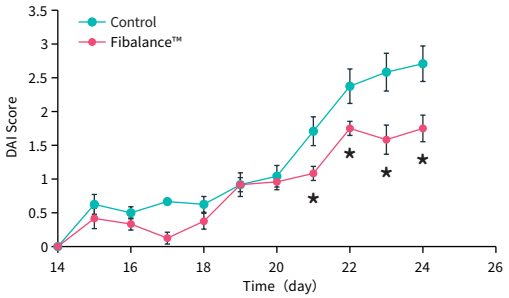
# Colitis Alleviation

**Fibalance™ effectively maintains the body weight in DSS-treated objects**



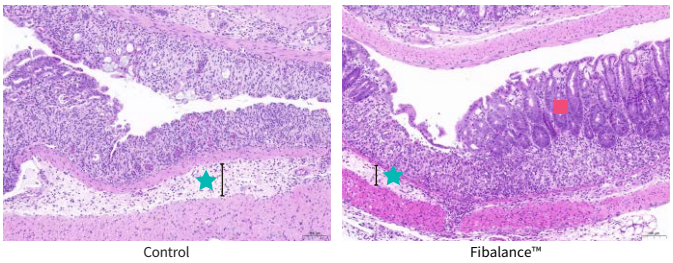

★ Indicate statistical significance at P<0.05

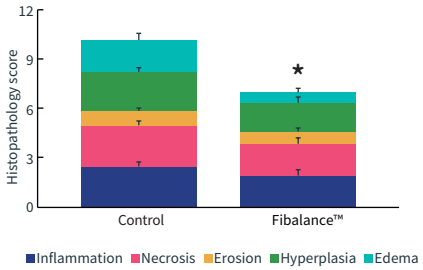
**Fibalance™ significantly alleviates colitis-related symptoms in DSS-treated objects**




Note: DAI score = (body weight changes + occult blood + stool condition) / 3, the higher the score, the more severe the symptoms
★ Indicate statistical significance at P<0.05

**Colon histopathology (DSS-induced colitis) comparison between the control and Fibalance™ group**




Note: the higher the score, the more severe the symptoms
★ Indicate statistical significance at P<0.05

- **Fibalance™ effectively alleviates colitis symptoms, with noticeable crypts observed.**
- **Fibalance™ efficiently reduces inflammatory cell infiltration and alleviates submucosal edema.**

# Physical and Chemical Properties of Fibalance™

## *Molecular weight and purity*

- Fibalance™ has an average molecular weight of 20,000 Da
- More narrow and uniform molecular weight distribution, higher purity

## *Physical appearance*

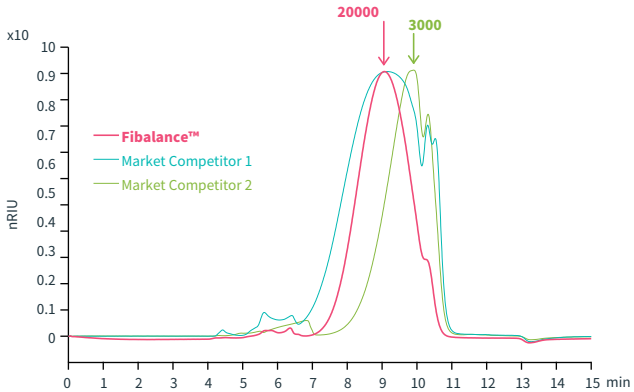
- Transparent, colorless, and odorless
- Good water solubility

## *High stability*

- Non-hygroscopic and no agglomeration
- Heat-resistant: stable from -18° C to 120 ° C without degradation
- Stable across a broad pH range (pH 3-8)

## *Low viscosity*

- The viscosity of 5% (w/v) Fibalance™ aqueous solution is < 10 mPa·s, which is 1000 times lower than 5% (w/v) guar gum solution.




**Pic: Molecular weight distribution of Fibalance™ and Market Competitors**

References:
[1]Quartarone G. Role of PHGG as a dietary fiber: a review article. Minerva Gastroenterologica e Dietologica. 2013 Dec;59(4):329-340.
[2]High-fiber diet supplementation in patients with irritable bowel syndrome (IBS): a multicenter, randomized, open trial comparison between wheat bran diet and partially hydrolyzed guar gum (PHGG).[J].Digestive Diseases & Sciences, 2002, 47(8):1697-1704.

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# *Fibalance™ Applications*

**Prebiotic & Probiotic Powdered Mix**

**Prebiotic Complex**

**Fiber-rich Prebiotic Juice**

**Food for Special Medical Purposes**

**Prebiotic Cheese**

**Prebiotic Tablets**

**Prebiotic Jelly**

# CONTACT US

**4F, Bldg. 1B, 955 Liuxiang Hwy.,Shanghai 201800, China**
**Tel.:**+86 21 5916 5130 **Email:**info@zymebase.com

ZymeBase ZymeBase ZymeBase ZymeBase ZymeBase www.zymebase.com