

# PROBIOTICS

BIOGROWING | Reliable for a Better World.





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# **About BioGrowing**

BioGrowing is a subsidiary of JuneYao Health, which is a member of JuneYao Group. JuneYao Group, founded in 1991, is a modern service enterprise focusing on industrial investment. It has four A-share listed companies in China with a total market value of 20 billion USD. It is one of the top 500 private enterprises in the service industry in China, with a credit rating of AA+.

BioGrowing, headquartered in Shanghai, was founded in 2006. The production base covers an area of 36,666 square meters and has an annual capacity of 1200 tons of highly active probiotics powder. It is one of the largest probiotics production bases in Asia. Its product range covers probiotic powder, starter cultures, functional food, and derivative products, widely used in food, medicine and healthcare, daily chemicals, aquaculture, and many other fields.

With "BioGrowing, Reliable for a Better World" as its core value, BioGrowing is constantly committed to probiotics' research, development, and innovation, moving continuously towards the vision of a "global leading probiotics manufacturer" and providing customers with a full range of product solutions and quality services.

# **Milestones**

2023

- regions around the world
- · Achieved kosher and FSSC22000 certificates

2020

- Won the honorary title of Qingpu District Certified Enterprise **Technology Center**
- BioGrowing's products are exported to 60 countries and regions around the world

2018

• Reached a production capacity of 300 tons/year

2015

- · Won the honorary title of national "High-tech Enterprise"
- Obtained the IS09001 quality management system

2013

- Obtained cGMP certification issued by US-NSF
- Became a joint training practice base for graduate students of Beijing Agricultural College
   Was the first Shanghai based company to obtain the Food

2011

- · Won the Food and Beverage Industry-Ringier Technology
- Won the micro-embedding patent authorization Became a member of China Dairy Industry Association

2009

2006

- · BioGrowing was established in Qingpu Industrial Zone,
- · BioGrowing Probiotics R&D Center was established.

2024

2021

- · Won the Qingpu Outstanding Talent Team Award

2019

- Built a new production line for Bacillus coagulans Won the honorary title of National "High-Tech Enterprise" again Won the honorary title of "High-tech Research and Development

2016

- Won the title of "Science Popularization Base" awarded by Shanghai Science and Technology Committee

  Became the member of Shanghai Biomedical Industry

2014

The only Chinese company to take part in drafting the industrial standards of "Lactic Acid Bacteria for Food Processing" by the Ministry of Industry and Information Technology

2012

- · Began to operate in overseas markets
- · Became a member of the chinese Association of Food Science and
- Awarded the title of "Industrialization Base of National Dairy Engineering Technology Research Center"

2010

2008

Our R&D Center has become a Post-Doctoral Research

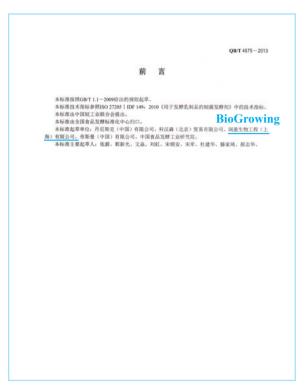
1998

# **Industry Position**

In July 2014, the Ministry of Industry and Information Technology issued "Lactic acid bacteria for food process"

—— BioGrowing was one of the drafting units.



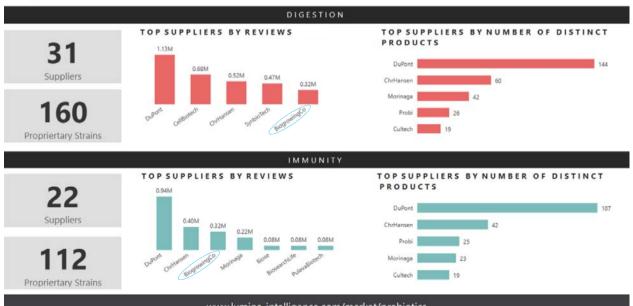


#### **BioGrowing Market Status**

(TOP supplier by reviews. TOP3 in immunity probiotic supplement, TOP5 in digestion probiotic supplement.)

Lumina Intelligence

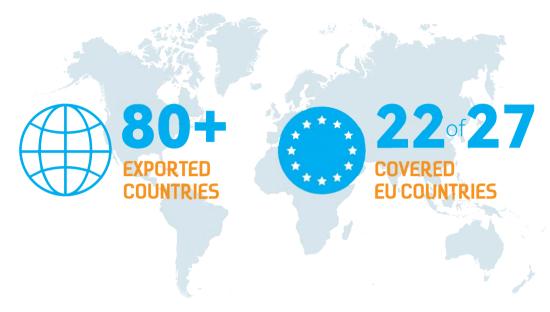
DIGESTION VERSUS IMMUNITY PROBIOTIC SUPPLEMENTS



www.lumina-intelligence.com/market/probiotics

# **Global Reach**

With a market presence in over 80 countries and regions, covering 22 countries out of the 27 EU Member States, BioGrowing is a globally reputed player in probiotics.



## **Honor and Qualification**

#### **Academic Frontier**

More than 100 scientific research papers published at domestically and internationally.







#### **Authorized Patents**

More than 70 invention patents and utility model patents have been authorized.





#### International authoritative quality standard certification

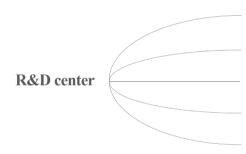
- 1. ISO22000 food safety management system certification
- 2. ISO9001 quality management system certification
- 3. HACCP food safety assurance system certification
- 4. Canada NNHPD-FSRN Overseas manufacturer certification
- 5. NSF-cGMP dietary Supplement Certification in the United States
- 6. FDA registration and certification
- 7. British BRC GS certification
- 8. Halal certification
- 9. Kosher certification
- 10. FSSC22000 certification

# Research and Development

Behind every strain, there is a professional R&D team.

BioGrowing is an R&D-driven high-tech enterprise. BioGrowing's R&D Center focuses on the research and development of probiotic strains, fermentation production, active functions, and product applications.





- · Bacteria Library
- Basic Research Institute (Including Industry-University-Research platform)
- Medical Research Institute (ODM/CDMO Technical support)
- Dairy Research Institute
   (Fermentation application solutions and technical support)
- · Applied Research Institute

Core Industrialization Technology

The entire production process from fermentation to freeze-drying, along with the technological innovations in high-stability, high-density fermentation-related processes.

## **High-Density Fermentation Technology**

The maximum number of viable bacteria per gram of probiotic bacteria powder can reach more than one trillion CFU.

## Non-dairy lyophilization protection technology

Achieve the manufacture of allergen-free probiotic bacteria powder and improve product safety.

## Functional fermentation technology

Lactiplantibacillus plantarum powder with high glutamine synthase activity can be produced.

# **Cryogenic freezing** technique

Cryogenic freezing technique is characterized by high quality, high efficiency, and low cost.



#### **Industry Association Cooperation**

The International Probiotic Association China Nutrition Society

China Dairy Industry Association

China Food Additives Association

Lactic Acid Bacteria Branch of Chinese Society of Food Science and Technology National Dairy Engineering Technology Center

China Nutrition and Health Food Association

## Flora-Focus® Probiotic Bacteria Strains

BioGrowing	Strains Generic Latin S	Scientific Name	Potency
Code	Current name of bacteria species	Previous name of bacteria species	(CFU/g)
LA-G80	Lactobacillus acidophilus	Lactobacillus acidophilus	2.0*1011
Lp-G18	Lactiplantibacillus plantarum (Active and Postbiotic)	Lactobacillus plantarum	5.0*1011
ZJUF T17	Lactiplantibacillus plantarum	Lactobacillus plantarum	3.0*1011
ZJUF T34	Lactiplantibacillus plantarum	Lactobacillus plantarum	3.0*1011
ZJUF N1	Lactiplantibacillus plantarum (Active and Postbiotic)	Lactobacillus plantarum	3.0*1011
YS1	Lactiplantibacillus plantarum	Lactobacillus plantarum	3.0*1011
J26	Lactiplantibacillus plantarum (Active and Postbiotic)	Lactobacillus plantarum	4.0*1011
Lr-G14	Lacticaseibacillus rhamnosus	Lactobacillus rhamnosus	5.0*1011
JL1	Lacticaseibacillus rhamnosus (Active and Postbiotic)	Lactobacillus rhamnosus	5.0*1011
LPc-G110	Lacticaseibacillus paracasei (Active and Postbiotic)	Lactobacillus paracasei	4.0*1011
LR-G100	Limosilactobacillus reuteri	Lactobacillus reuteri	2.0*1011
LS-G60	Ligilactobacillus salivarius	Lactobacillus salivarius	1.0*1011
LG-G12	Lactobacillus gasseri	Lactobacillus gasseri	2.0*1011
LJ-G55	Lactobacillus johnsonii	Lactobacillus johnsonii	1.0*1011
BB-G90	Bifidobacterium bifidum	Bifidobacterium bifidum	2.0*1011
BL-G101	Bifidobacterium animalis subsp. lactis	Bifidobacterium animalis subsp. lactis (B.lactis)	5.0*1011
BL-G301	Bifidobacterium longum subsp.longum	Bifidobacterium longum subsp. longum (B.longum)	1.0*1011
LC-G11	Lacticaseibacillus casei	Lactobacillus casei	4.0*1011
LB-G40	Lactobacillus delbrueckii subsp.bulgaricus	Lactobacillus delbrueckii subsp. bulgaricus	5.0*1010
LL-G41	Lactobacillus delbrueckii subsp.lactis	Lactobacillus delbrueckii subsp. lactis	5.0*1010
LH-G51	Lactobacillus helveticus	Lactobacillus helveticus	1.0*1011
LF-G89	Limosilactobacillus fermentum	Lactobacillus fermentum	2.0*1011
Lc-G22	Lactobacillus crispatus	Lactobacillus crispatus	1.0*1011
LK-G03	Latilactobacillus kefiranofaciens subsp.kefiranofaciens	Latilactobacillus kefiranofaciens subsp.kefiranofaciens	1.0*1011
LS-G23	Latilactobacillus sakei	Latilactobacillus sakei	1.0*1011
LC-G33	Latilactobacillus curvatus	Latilactobacillus curvatus	1.0*1011
BI-G201	Bifidobacterium longum subsp.infantis	Bifidobacterium longum subsp. infantis (B.infantis)	1.0*1011
BB-G95	Bifidobacterium breve	Bifidobacterium breve	3.0*1011
BQ-G66	Bifidobacterium adolescentis	Bifidobacterium adolescentis	1.0*1011
ST-G30	Streptococcus salivarius subsp. thermophilus	Streptococcus thermophilus	4.0*1011
LLL-G25	Lactococcus lactis subsp.lactis	Lactococcus lactis subsp. lactis	2.0*1011
LLC-G42	Lactococcus cremoris	Lactococcus lactis subsp. cremoris	2.0*1011
PA-G73	Pediococcus acidilactici	Pediococcus acidilactici	2.0*1011
PP-G15	Pediococcus pentosaceus	Pediococcus pentosaceus	2.0*1011
LM-G27	Leuconostoc mesenteroides subsp.mesenteroides	Leuconostoc mesenteroides subsp. mesenteroides	1.0*1011
BC-G44	Weizmannia coagulans	Bacillus coagulans	2.0*1011
EP-GA65	Enterococcus faecalis	Enterococcus faecalis	2.0*1011
SF-GA12	Enterococcus faecium	Enterococcus faecium	2.0*1011
SD-G19	Saccharomyces boulardii	Saccharomyces boulardii	2.0*1010
BS-GA28	Bacillus subtilis	Bacillus subtilis	8.0*1011
BL-GA26	Bacillus licheniformis	Bacillus licheniformis	5.0*1011

Storage and shelf life:

Probiotics powder can be stored at -18°C or lower.

Weizmannia coagulans can be stored at room temperature.

Shelf life: 24 months

Packing specifications:

High resistance composite aluminum foil bag, 500g/bag, 2kg/bag, 5kg/bag.

#### Remarks:

- (1) All strains have undergone genetic identification, and partial strains have completed complete gene sequencing.
- (2) Registered patent collection at an international culture collection center.
- (3) Single-strain powder, mixed-strain powder, or premix formulation can be provided according to customers' needs.
- (4) Complete datasheets can be provided upon request.



Strains	Functional Research and Report
	③ Laxative effect (★)
	Improve superficial gastritis and relieve stomach discomfort (★)
Lactobacillus acidophilus LA-G80	<ul> <li>© Chemical liver injury protection (★) Liver care (☆) Improving cholesterol (★)</li> </ul>
	Lower blood sugar ( $\triangle$ ) Lowering blood-fat as assistance ( $\triangle$ )
	$\circ$ Antioxidant ( $\triangle$ )
Diff. I	Alleviate functional constipation (○)
Bifidobacterium animalis subsp. Lactis BL-G101	<ul> <li>Alleviate gluten intolerance (▲)</li> </ul>
T. C. 1. 21. 1. C.14.	Improve immunity and Auxiliary treatment for psoriasis (▲, +)
Lacticaseibacillus rhamnosus Lr-G14	■ Inhibit Candida albicans growth (▲) Inhibit Candida albicans biofilm formation (▲)
	③ Improve intestinal flora variety (▲) Inhibit Helicobacter pylori (▲)
	○ Nephrotic syndrome intervention, Immune regulation (▲, +)
Lactiplantibacillus plantarum Lp-G18	Improving blood lipid levels (▲, +) Improving blood sugar levels (▲)
	<ul> <li>● High-yield glutamine synthetase patent (☆)</li> </ul>
	Anti-aging, Increase total antioxidant level (▲)
I	Improve oral monocyte inflammation (▲, +) Periodontal fibroblast inflammation (▲, +)
Lacticaseibacillus paracasei LPc-G110	Inactivated bacteria also active (▲)
Bifidobacterium longum subsp. Longum BL-G301	Improve uremia (▲, +) Improve chronic nephritis (▲, +) Alleviate gluten intolerance (▲
	§ Laxative effect (★)
Bifidobacterium bifidum BB-G90	Improving liver damage (★) Liver care (☆)
	② Anti-plasmodium antigen (△) Alleviate gluten intolerance (▲)
Ligilactobacillus salivarius LS-G60	Improve breath (▲, +) Inhibit oral bacteria (▲, +)
Lactobacillus gasseri LG-G12	Increased brown adipose tissue (▲)
Laciobaciius gasseri LG-G12	Assisted in lowering triglycerides and very low-density lipoproteins (▲)
Lactobacillus johnsonii LJ-G55	■ Inhibiting Candida albicans growth (▲) Inhibiting Candida albicans biofilm formation (▲)
	⑤ Inhibit Helicobacter pylori(○)
Limosilactobacillus reuteri LR-G100	Reduce cholesterol level (○)
	<ul> <li>Relieve traumatic oral lesions (☆) Colonization and proliferation in female intimate care (▲)</li> </ul>
Lactiplantibacillus plantarum ZJUF T17	Alleviate weight gain (☆, ▲)
Lactiplantibacillus plantarum ZJUF T34	Alleviate constipation (☆)
Lactiplantibacillus plantarum YS1	§ Alleviate constipation (☆)

Gastrointestinal healthImmune healthMetabolic healthOthers

Note +: Clinical research; ☆: Patented strain; ★: Health food function test; △: Functional testing of third party organizations;

 $\blacktriangle$  : International papers;  $\circ :$  Domestic papers.

# **Heat Resistant Probiotics**

The King of Probiotics: Weizmannia coagulans BC-G44

Collection number: CCTCC.M.2018445 Derived from fermented yellow peaches



#### **Stability**

Resistant to stomach acid, bile salt, high temperature, and exhibits good storage stability at room temperature

#### **Health Benefits**

- · Boost immunity
- · Athletic nutrition

#### **Application Advantages**

Can be used in various dosage forms, such as powder, tablets and capsules and applied to many kinds of food, such as candy, bakery, chocolate, coffee and tea



#### **Outstanding Features**

In addition to the acid production function of common lactic acid bacteria, it also has the features below.

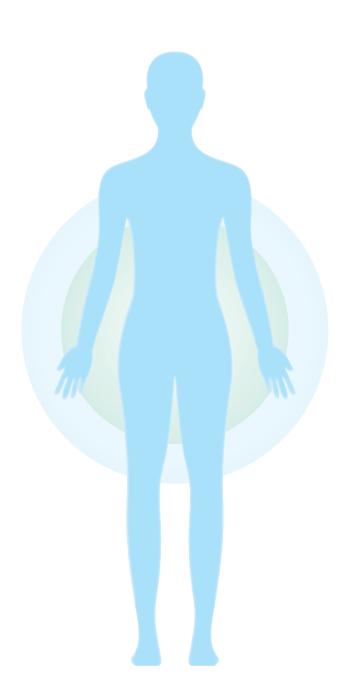
High stability 96.4%

Resistant to high temperature 80-140°C

Resistant to stomach acid pH 2.0

Resistant to bile salt 0.3%

# Health Applications of Probiotics



- Mental health; Sleep promotion
- O Allergic rhinitis alleviation
- Oral health care
- Skin health
- Hangover and liver protection
- O Support gastric comfort
- Anti-Helicobacter pylori
- Support bowel health
- © Relieve constipation
- Weight management
- O Support vaginal health
- © Support healthy blood sugar level
- O Children's health
- Anti-allergy
- Immunity
- Menopause health
- Management of blood sugar
- Relief of antibiotic-associated diarrhea and adverse reactions

## Popular tracks of health application



#### **Gastrointestinal health**

(Protect the stomach mucosa, moisten bowel)

Strains: Lactobacillus acidophilus LA-G80, Bifidobacterium animalis subsp. lactis BL-G101, Bifidobacterium bifidum

BB-G90, Bifidobacterium longum subsp.longum BL-G301, Lactiplantibacillus plantarum ZJUF T34,

Lactiplantibacillus plantarum Lp-G18, Lactiplantibacillus plantarum YS1

Literature: The relaxing bowel effect of composite probiotic powder MIX -G200. Chinese Journal of Microecology, Jun. 2011, Vol. 23 No. 6

Evaluation of the health benefits of consumption of extruded tannin sorghum with unfermented probiotic milk in individuals with chronic kidney disease. Food

Research International Volume 107, May 2018, Pages 629-638



#### Immunity (Immunity, Support inflammatory response)

Strains: Bifidobacterium animalis subsp. lactis BL-G101、Lactiplantibacillus plantarum Lp-G18、Lacticaseibacillus rhamnosus Lr-G14、

Bifidobacterium bifidum BB-G90、Lacticaseibacillus paracasei LPc-G110、Bifidobacterium longum subsp.longum BL-G301

Literature: Effect of Multi-Strain Probiotic Supplementation on URTI Symptoms and Cytokine Production by Monocytes after a Marathon Race: A Randomized,

Double-Blind, Placebo Study. Nutrients 2021, 13, 1478. https://doi.org/10.3390/nu13051478



#### Female intimate care (Promote microbial balance)

Strains: Lactobacillus crispatus Lc-G22, Lactobacillus gasseri LG-G12, Lactobacillus johnsonii LJ-G55, Lactobacillus acidophilus

LA-G80, Lacticaseibacillus rhamnosus Lr-G14

Literature: AVALIAÇÃO IN VITRO DA AÇÃO MICROBICIDA DE LACTOBACILLUS SPP. SOBRE CANDIDA SPP. 2020



#### Oral care (Freashen breath, promote oral microbial balance, support oral health)

Strains: Ligilactobacillus salivarius LS-G60, Lacticaseibacillus paracasei LPc-G110

Literature: Are Lactobacillus salivarius G60 and inulin more efficacious to treat patients with oral halitosis and tongue coating than the probiotic alone and placebo? A randomized clinical trial. Journal of Periodontology .2020, 91,6: 775-783



#### Anti-Helicobacter pylori (Inhibit Helicobacter pylori)

Strains: Lactobacillus acidophilus LA-G80, Bifidobacterium bifidum BB-G90, Limosilactobacillus reuteri LR-G100,

Lactiplantibacillus plantarum Lp-G18

Literature: Phenotype investigation on a strain of lactobacillus reuteri. China dairy industry. 2012,03



#### Liver care (Protective effect on acute alcoholic gastric mucosa injury and chemical liver injury)

Strains: Lactobacillus acidophilus LA-G80, Bifidobacterium bifidum BB-G90

Literature: Function experiment report of health food in China



#### Antiallergy (Aid gluten-sensitive digestion)

Strains: Bifidobacterium animalis subsp. lactis BL-G101, Bifidobacterium bifidum BB-G90, Bifidobacterium longum subsp.longum

BL-G301、 Lactobacillus acidophilus LA-G80

Literature: Digestion of Intact Gluten Proteins by Bifidobacterium Species: Reduction of Cytotoxicity and Proinflammatory Responses, J. Agric. Food Chem. 2020, 68, 4485-4492



#### Blood glucose management (Improve metabolic syndrome, support healthy blood lipids & sugar levels)

Strains: Lacticaseibacillus rhamnosus Lr-G14, Lactiplantibacillus plantarum Lp-G18, Bifidobacterium animalis subsp. lactis

BL-G101、Lactobacillus acidophilus LA-G80、Lacticaseibacillus casei LC-G11、Lactobacillus johnsonii LJ-G55、

Limosilactobacillus reuteri LR-G100, Bifidobacterium longum subsp.longum BL-G301, Bifidobacterium bifidum BB-G90

Literature: Rationale and Design of a Randomized Controlled Trial to Evaluate the Effects of Probiotics during Energy Restriction on Blood Pressure, Body Composition, Metabolic Profile and Vascular Function in Obese Hypertensive Individuals. Artery Research Vol. 26(2); June (2020)



#### Weight management (Support weight management, Alleviate weight gain)

Strains: Lactiplantibacillus plantarum ZJUF T17、Lactiplantibacillus plantarum ZJUF T34、Lactobacillus acidophilus LA-G80、Lactobacillus gasseri LG-G12、Bifidobacterium animalis subsp. lactis BL-G101、Lactiplantibacillus plantarum

Lp-G18、 Bifidobacterium longum subsp.longum BL-G301

Literature: Antibiotic Followed by a Potential Probiotic Increases Brown Adipose Tissue, Reduces Biometric Measurements, and Changes Intestinal Microbiota Phyla in Obesity. Probiotics and Antimicrobial Proteins, https://doi.org/10.1007/s12602-021-09760-0

Lactobacillus plantarum helps to suppress body weight gain, improve serum lipid profile and ameliorate low-grade inflammation in mice administered with glycerol monolaurate. Journal of Functional Foods 53 (2019) 54-61

# **ODM | CDMO**

BioGrowing provides customized and high-quality solutions.

BioGrowing is one of the largest probiotics production bases in Asia.

- © Class 100,000 cleanroom production workshop
- © More than 10 sets of intelligent production system
- © 1200 tons of lactic acid bacteria freeze-dried powder per year







- © Advanced equipment: low-temperature vacuum freeze dryer, freezing high-speed centrifuge, automatic fermentation system.
- © Patented technology: high-density fermentation technology, high stability patent embedding protection technology, high activity freeze-dried bacteria powder technology, cryogenic granulation technology.



Professional R&D



**Multiple recipes** 



Lean production



**Packaging customization** 



**Full control** 



**Qualification support** 

# **Package Systems**

### Capsules

Types			Descriptions
			Vegetable capsules (HPMC)
Capsule shell			Acid-resistant vegetable capsules
			Gelatin capsules
	Bottles		PET bottles
	Bottles		Glass bottles
Outer packing	Blisters	Size 00#	Cold forming Alu-Alu blisters (500-700mg)
		Size 0#	PVC/PVDC blisters (About 500mg)
		Size 1#	Alu-Alu blister (320-380mg)
		Size 2#	Alu-Alu blister or bottles (220-250mg)

<sup>\*</sup> Other capsule sizes are available on inquiry.



Hard Double Aluminum Blister Board (95×146 mm)



PVC/PVDC (62×95 mm)



Soft Alu-alu Blisters (76×132 mm)



Capsule bottle



CSP bottles

# **Package Systems**

#### Sachets

Packing	Siz	e	Sh	ape	Packing material		
weight	Unfolded size	Finished size	Round edge	square edge	racking material		
1-1.5g	90×58 mm	87×24 mm	$\sqrt{}$	-			
1-1.5g	85×70 mm	82×27 mm	√	-			
2-2.5g	110×58 mm	107×24 mm	√	-			
2-2.3g	100×70 mm	97×27 mm	√	-	PE/Alu/PET		
3-3.5g	120×58 mm	117×24 mm	√	-			
3-3.5g	110×70 mm	107×27 mm	$\sqrt{}$	-			
5g	130×70 mm	127×29 mm	$\sqrt{}$	-			
1.5g	75×100 mm	75×50 mm	-	$\sqrt{}$			
2g	80×100 mm	80×50 mm	-	$\sqrt{}$	Sobres rectangulares		
4g	90×120 mm	90×60 mm	-	√	sellados en tres lados		
6g	90×140 mm	90×70 mm	-	√			



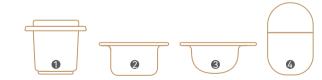


Stickpack (round edge)

Three-sides sealed rectangular sachet

#### Shaped bottle

- Specification: 2g Diameter: 32mm, bottle height: 30mm (can be customized)
- 2 Specification: 2g Diameter: 36mm, bottle height: 18mm (can be customized)



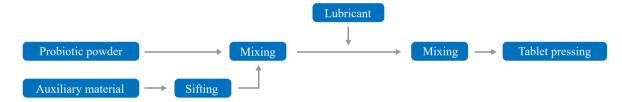
- Specification: 2g Outer Diameter: 36mm, Inner Diameter: 28mm, Height: 17mm (can be customized)
- Specification: 2g Outer Diameter: 17mm, Height: 41mm (can be customized)



#### Tablets

Probiotic tablets are flaky preparations made by mixing probiotic powder and excipients evenly.

#### Process flow



#### Technical parameters

31
100 kN
25 mm
19 mm
10 mm
85000 tablets/h

#### Packaging

Circular tablet: 1.0-1.5g/tablet, 1 tablet in each bag Oval tablet: 1.0-1.2g/tablet, 10 tablets per blister



#### Applications







Tablet candy

Chewable tablets

Tablets

# **Finished Products**

## **Probiotic Capsules**



#### Female Care Capsules

#### Spec:

- 10 Billion,
- 500mg capsule



#### **IBS Care Capsules**

#### Spec:

- 30 Billion,
- 500mg capsule



#### **Anti-Anxiety Capsules**

#### Spec:

- 10 Billion,
- 500mg capsule



#### Vaginbiol Capsules

#### Spec:

- 20 Billion,
- 500mg capsule



#### **Dynabiotics Capsules**

#### Spec:

- 10 Billion,
- 500mg capsule



#### **Biotic-Restore Capsules**

#### Spec:

- 20 Billion,
- 500mg capsule



#### **Omebiotix Capsules**

#### Spec:

- 40 Billion,
- 500mg capsule



#### **Biotic Plus Capsule**

#### Spec:

- 20 Billion,
- 250mg capsule

Stated health benefits of these products have not been evaluated by the Food and Drug Administration Authority. These products are not intended to diagnose, treat, cure, or prevent any disease.

## **Finished Products**

#### **Probiotic Solid Drinks**



#### Wisdom+ Live Probiotic Powder

#### Spec:

- 20 Billion,
- 2.0g sachet



#### Pro-Immuno Live Probiotic Powder

#### Spec:

- 10 Billion,
- 2.0g sachet



#### Anti-allergy Live Probiotic Powder

#### Spec:

- 50 Billion,
- 2.0g sachet



#### Vaginbiol Live Probiotic Powder

#### Spec:

- 50 Billion,
- 3.0g sachet



#### **Intest Booster Live Probiotic Powder**

#### Spec:

- 30 Billion,
- 2.0g sachet



#### Stomach Care Live Probiotic Powder

#### Spec:

- 20 Billion,
- 2.0g sachet



#### Soberbiotix Probiotic Powder

#### Spec:

- 50 Billion,
- 2.0g sachet



#### Slim+ Live Probiotic Powder

#### Spec:

- 20 Billion,
- 2.0g sachet

Stated health benefits of these products have not been evaluated by the Food and Drug Administration Authority. These products are not intended to diagnose, treat, cure, or prevent any





### **Advanced Starter Technology**

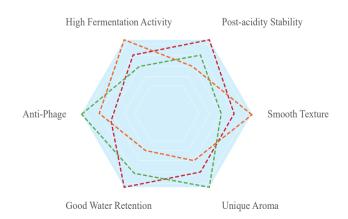
- O High-density fermentation technology
- O High-activity freeze-drying technology
- O Cryogenic granulation technology



## **Strict Quality Control**

- O Strain specificity
- O Process stability
- O Purity of fermentation agents
- O Product consistency

# **Premium Starter Cultures Evaluate Six Dimensions**



#### **BioGuard® Starter Cultures** (DVS for industrial use)

	Culture type										Characteristics				
Name	ST	LB	LL.L	LL.C	LC	LA	BL	LPc	Lr	Lp	Acidification speed	Viscosity	Flavor	Post-acidity	Applications
Thermophilic	dairy	star	ter cu	ıltures											
GF231	+	+									***	**	***	****	
GF468	+	+									***	**	**	***	Set yogurt
GF655	+	+									***	**	****	***	
GF665	+	+									***	***	***	***	
GF668	+	+									***	***	****	***	Set yogurt Stirred yogurt
GF669	+	+									****	***	***	***	Surred yogurt
GF686	+	+									****	***	***	***	
GF689	+	+									***	***	****	*	
GF859	+	+									***	***	***	**	Set yogurt
GF867	+	+									***	***	**	**	Stirred yogurt  Drinkable yogurt
GF868	+	+									***	****	****	**	
GF888	+	+									***	****	****	*	
GF968	+	+									***	****	**	**	1
GF-BY01	+										**	***	****	*	
GF-BY02	+										**	****	***	*	Drinkable yogurt
Mesophilic da	iry st	arte	r cultu	ıres							'	•	•		
GF 218			+	+							*	*	***	**	Soft curd, cottage cheese
GF 227	+		+	+							**	**	**	**	Soft curd
GF 927	+		+	+							***	****	**	***	Soft curd
GF 937	+		+	+							***	****	**	***	Sour cream
Probiotic yog	urt be	evera	age st	arter c	ultu	res					'	•	•		
GF 101			+	+							*	*	***	**	Lactic acid
GF 201		+	+	+							**	*	**	***	Bacteria drink
Dis. (1)	tarter	cult	ures												ı
Plant based s															
	+	+									T. Control of the Con				
GS 485	+	+				+				+	Plant-bas	ed ferme	entation, c	lata shee	t available
GS 485 NP 108	+	+				+				+	Plant-bas on reque		entation, c	lata shee	t available
GS 485 NP 108 Lp-G18			ıltııre	2		+				+			entation, c	lata shee	t available
GS 485 NP 108			ultures	S		+		+	+		on reque	sts.			t available
GS 485 NP 108 Lp-G18 Biological pro	otectiv		ultures	S		+		+	+	+	on reque	sts.			

- (1) Thermophilic Starter Cultures: Culture fermentation temperature range preferred at 37°C~44°C.
- (2) Mesophilic Starter Cultures: Culture fermentation temperature range preferred at 25°C~37°C.
- (3) Culture's composition: ST: Streptococcus salivarius subsp. thermophilus, LB: Lactobacillus delbrueckii subsp. bulgaricus, LL.L: Lactococcus lactis subsp. lactis, LL.C: Lactococcus cremoris, LA: Lactobacillus acidophilus, BL: Bifidobacterium animalis subsp. lactis, LC: Lacticaseibacillus casei, LPc: Lacticaseibacillus paracasei, Lr: Lacticaseibacillus rhamnosus, Lp: Lactiplantibacillus plantarum.

  (4) Characters: \*\displantibacillus \displantibacillus \disp
- (5) Some starter cultures can be provided in deep-frozen granule form.



## BioGuard® Starter Cultures (Cheese starter cultures)

			Cu	lture ty	/pe			Cha	racteris	stics		
Name	ST	LB	LL.L	LL.C	LL.D	L	LH	Acidification speed	Viscosity	Flavor	Applications	
Thermophilic starter cultures												
ST231	+							***	**	*	Danta filata managanalla	
TC231	+	+						***	**	**	Pasta filata, mozzarella	
ST320	+							***	**	*	Hard cheese	
ST330	+							***	**	*	Semi hard cheese	
LH15							+			****	D:	
LH16							+			****	Ripening culture	
Mesophilic dairy starter cultures												
GF 218			+	+				*	*	***	Soft curd, cottage cheese	
GF 227	+		+	+				**	**	**	Soft curd	
GF 927	+		+	+				***	****	**	Soft curd	
GF 937	+		+	+				***	****	**	Sour cream	

#### Remark:

- (1) Thermophilic Starter Cultures: Culture fermentation temperature range preferred at 37°C~44°C.
- (2) Mesophilic Starter Cultures: Culture fermentation temperature range preferred at 25°C~37°C.
- (3) Culture's composition: ST: Streptococcus salivarius subsp. thermophilus, LB: Lactobacillus delbrueckii subsp. bulgaricus, LL.L: Lactococcus lactis subsp. lactis, LL.C: Lactococcus cremoris, LL.D: Lactococcus lactis subsp. lactis biovar diacetylactis, L: Leuconostoc mesenteroides subsp. mesenteroides, LH: Lactobacillus helveticus
- (4) Characters:  $\star$  Very Low  $\star\star$  Low;  $\star\star\star$  Medium;  $\star\star\star\star$  High;  $\star\star\star\star\star$  Very High.
- (5) Some starter cultures can be provided in deep-frozen granule form.





- APAC TOP3 in immunity probiotic
- APAC **TOP5** in digestion probiotic
- Annual export volume ranks among the top
- Owns 220+ international air routes to ensure the activity

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