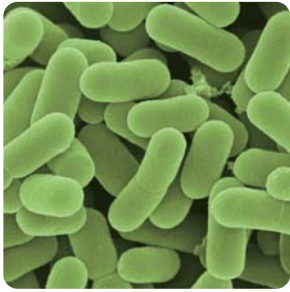




# BIOGROWING PROBIOTICS

COMPREHENSIVE PROBIOTIC  
SOLUTIONS PROVIDER



Innovation



Quality



Reliability



FOCUS ON PROBIOTICS MORE THAN

20  
YEARS

# Introducing BioGrowing

With its market in 53 countries, Biogrowing is a reputed global probiotics player and it has been providing comprehensive probiotic solutions since 2006. Our business encompasses probiotic products for healthcare, food, dairy, animal care, and agricultural domains. Both our headquarters and our GMP compliant factory with 300 tons/year capacity are located in Shanghai, China. In addition, we have two other manufacturing facilities in China, through which we have been supplying probiotic formulations in the domestic Chinese market since the 1990s.



## BioGrowing's business and a state-of-art facility

- Owns China's largest production line for Lactic Acid Bacteria with an annual capacity of manufacturing 300 tons of high potency probiotic powder
- Production lines are certified to meet the criteria set by CFDA-GMP/SC, ISO/HACCP, NSF-cGMP, Halal, etc.
- Gets ISO22000 certificates, Gets BRC GS certificates
- Deploy patented industry-leading fermentation technology
- Recognized as a high-tech enterprise by the Shanghai municipal government
- Participated in the drafting of regulations for the probiotic industry in China

- 1) "Approved probiotic species for human foods" (2010, Ministry of Health, China)
- 2) "Lactic Acid Bacteria for food process" Industry guideline (2014, Ministry of Health, China)
- 3) "National Standards for food safety: General requirements for bacteria species for food" (2014, Ministry of Health, China)

- Established an enterprise-post-doctoral research center with China Northeast Agriculture University.
- Member of China Food Additives Association (CFAA).
- Member of China Dairy Industry Association (CDIA).
- Member of Chinese Institute of Food Science and Technology (CIFST).



# Milestones



# BioGrowing's approach to making quality probiotic products

With a 100,000 class GMP facility, we meet the requirements for medication production.



## Strain sources

- 1) Separating bacterial strains from traditional fermented foods or healthy human bodies
- 2) Finishing strain's identification at an authorized institution
- 3) Depositing strains at an IDA approved institution



## Manufacturing process

- 1) Production in GMP factory (class 100,000 clean area)
- 2) With patented fermentation technology, cultivating an advanced level of highly-active bacteria amount with high potency
- 3) With patent protected technology ensuring excellent stability
- 4) Strict production management ensuring excellent product quality



## Basic research for strains

- 1) Safety confirmation
- 2) Gastric acid and bile salts resistance test
- 3) Antibiotic sensitivity test
- 4) Colonization test
- 5) Metabolic mechanism research
- 6) Health efficacy research



## Application and development of probiotics

- 1) Probiotics dietary supplement (bacterial powder, mixed strains powder and probiotic preparations)
- 2) Dairy and beverage starter cultures
- 3) Food application (for baked food, beverages, etc.)
- 4) Agricultural probiotics (feed yeast, feed additives, pet food, veterinary medicine, etc.)



# Criteria for selecting beneficial probiotics

*Lactobacillus spp.* and *Bifidobacterium spp.* are the dominant probiotic bacteria found in the upper and lower intestine. They maintain a healthy balance of intestinal flora by producing organic acids and increase the acidity levels in the intestine, which in turn inhibits the growth of pathogens. They also produce substances which act as natural antibiotics and kill undesirable microorganisms. Using *Lactobacillus spp.* and *Bifidobacterium spp.* combinations in dietary supplements or dairy products yield health benefits for the host.

The following information is necessary to be considered in probiotic strains evaluation:

Quality Levels	Evaluation Items	Remarks
Critical requirements	Strains genetic identification	The most popular identification method is 16s-rRNA analysis. Reliable results should be officially availed from a government approved organization.
	IDAs (International Depository Authorities) deposits status	International Depository Authority (IDA) under the Budapest Treaty has approved 41 organizations globally for official microbe deposits. Some of these organizations include ATCC in the U.S., DSMZ in Germany, NCIM in the UK, and CCTCC and CGMCC in China.
Quality requirements	Methods of analysis	Enumeration method
	Cross-contamination controls	Third party qualifications and supplier side audit are helpful to monitor the quality system and identify potential quality risks. It is important to ensure the quality control at crucial control points to prevent cross-contamination.
	Hygienic index controls	Pathogenic index Heavy metals Index
	Package and logistic controls	Specification data sheets Validated package and logistic solutions
	Manufacturer's qualifications	Third party qualifications and supplier side audit will be helpful to monitor the quality system and potential quality risks.
Technological and regulatory requirements	Safety study	Popular lactic acid probiotic bacteria have been used for a very long time, and different SRAs (Strict Regulatory Authorities) have already approved the suitable probiotic strains to use in typical applications. Therefore, there is no need for specific safety studies, except in case of medical application or newly researched microbes.
	Stability study	It will be very important to understand and control the product stability.
	Regulatory guidelines	Refer to each SRA's guidelines
	Application guidelines	Collaborative projects with other probiotic players for developing new industry guidelines

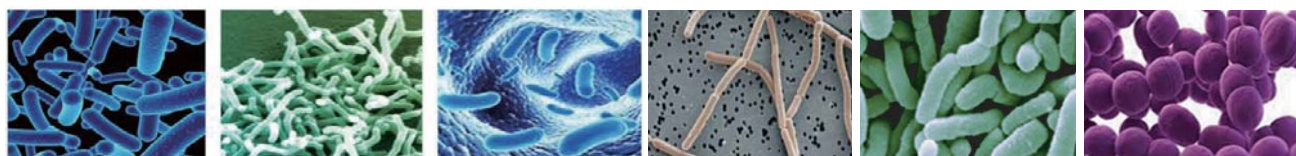
With increasing research in the probiotics domain, SRAs (Strict Regulatory Authorities) across the globe tend to approve probiotics as safe food ingredients. Most large probiotic companies have established robust quality and safety protocols to support their business.

# Flora-Focus® Probiotic Bacteria Strains

BioGrowing Code	Strains Generic Name	Chinese Name	Potency(CFU/g)
润盈菌株编号	菌株通用名称	中文名	活菌数 (CFU/g)
LA-G80	<i>Lactobacillus acidophilus</i>	嗜酸乳杆菌	2.0*10 <sup>11</sup>
Lp-G18	<i>Lactobacillus plantarum</i>	植物乳杆菌	5.0*10 <sup>11</sup>
Lr-G14	<i>Lactobacillus rhamnosus</i>	鼠李糖乳杆菌	5.0*10 <sup>11</sup>
LC-G11	<i>Lactobacillus casei</i>	干酪乳杆菌	4.0*10 <sup>11</sup>
LPc-G110	<i>Lactobacillus paracasei</i>	副干酪乳杆菌	4.0*10 <sup>11</sup>
LR-G100	<i>Lactobacillus reuteri</i>	罗伊氏乳杆菌	2.0*10 <sup>11</sup>
LB-G40	<i>Lactobacillus delbrueckii</i> subsp. <i>bulgaricus</i>	保加利亚乳杆菌	5.0*10 <sup>10</sup>
LL-G41	<i>Lactobacillus delbrueckii</i> subsp. <i>lactis</i>	乳酸乳杆菌	5.0*10 <sup>10</sup>
LS-G60	<i>Lactobacillus salivarius</i>	唾液乳杆菌	1.0*10 <sup>11</sup>
LH-G51	<i>Lactobacillus helveticus</i>	瑞士乳杆菌	1.0*10 <sup>11</sup>
LF-G89	<i>Lactobacillus fermentum</i>	发酵乳杆菌	2.0*10 <sup>11</sup>
LG-G12	<i>Lactobacillus gasseri</i>	格氏乳杆菌	2.0*10 <sup>11</sup>
LJ-G55	<i>Lactobacillus johnsonii</i>	约氏乳杆菌	1.0*10 <sup>11</sup>
LC-G22	<i>Lactobacillus crispatus</i>	卷曲乳杆菌	1.0*10 <sup>11</sup>
BB-G90	<i>Bifidobacterium bifidum</i>	两歧双歧杆菌	2.0*10 <sup>11</sup>
BL-G101	<i>Bifidobacterium animalis</i> subsp. <i>lactis</i> ( <i>B.lactis</i> )	乳双歧杆菌	5.0*10 <sup>11</sup>
BL-G301	<i>Bifidobacterium longum</i> subsp. <i>longum</i> ( <i>B.longum</i> )	长双歧杆菌	1.0*10 <sup>11</sup>
BI-G201	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> ( <i>B.infantis</i> )	婴儿双歧杆菌	1.0*10 <sup>11</sup>
BB-G95	<i>Bifidobacterium breve</i>	短双歧杆菌	3.0*10 <sup>11</sup>
BQ-G50	<i>Bifidobacterium adolescentis</i>	青春双歧杆菌	1.0*10 <sup>11</sup>
ST-G30	<i>Streptococcus thermophilus</i>	嗜热链球菌	4.0*10 <sup>11</sup>
LLL-G25	<i>Lactococcus lactis</i> subsp. <i>lactis</i>	乳酸乳球菌乳酸亚种	2.0*10 <sup>11</sup>
LLC-G42	<i>Lactococcus lactis</i> subsp. <i>cremoris</i>	乳酸乳杆菌乳脂亚种	2.0*10 <sup>11</sup>
PA-G73	<i>Pediococcus acidilactici</i>	乳酸片球菌	2.0*10 <sup>11</sup>
LM-G27	<i>Leuconostoc mesenteroides</i> subsp. <i>mesenteroides</i>	肠膜明串珠菌肠膜亚种	1.0*10 <sup>11</sup>
BC-G44	<i>Bacillus coagulans</i>	凝结芽孢杆菌	1.0*10 <sup>11</sup>
BC-G21	<i>Bacillus clausii</i>	克劳氏芽孢杆菌	1.0*10 <sup>11</sup>
CB-G57	<i>Clostridium butyricum</i>	丁酸梭菌	1.0*10 <sup>6</sup>
EP-GA65	<i>Enterococcus faecalis</i>	粪肠球菌	2.0*10 <sup>11</sup>
SF-GA12	<i>Enterococcus faecium</i>	屎肠球菌	2.0*10 <sup>11</sup>
LB-G302	<i>Lactobacillus buchneri</i>	布氏乳杆菌	1.0*10 <sup>11</sup>
SD-G19	<i>Saccharomyces boulardii</i>	布拉迪酵母	2.0*10 <sup>10</sup>
BS-GA28	<i>Bacillus subtilis</i>	枯草芽孢杆菌	8.0*10 <sup>11</sup>
BL-GA26	<i>Bacillus licheniformis</i>	地衣芽孢杆菌	5.0*10 <sup>11</sup>
BM-GA53	<i>Bacillus megaterium</i>	巨大芽孢杆菌	1.0*10 <sup>10</sup>

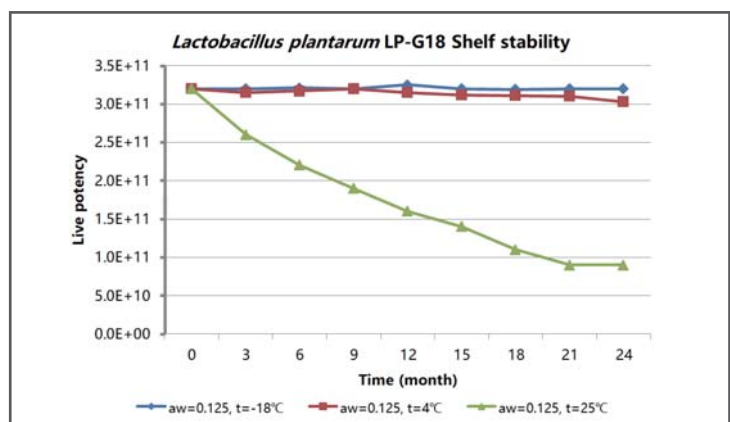
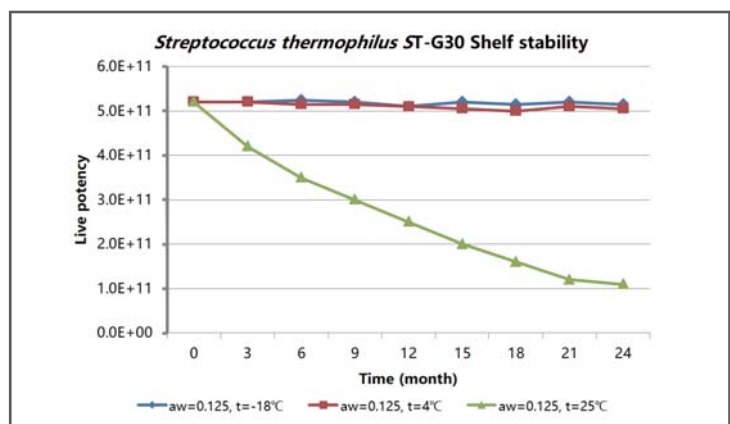
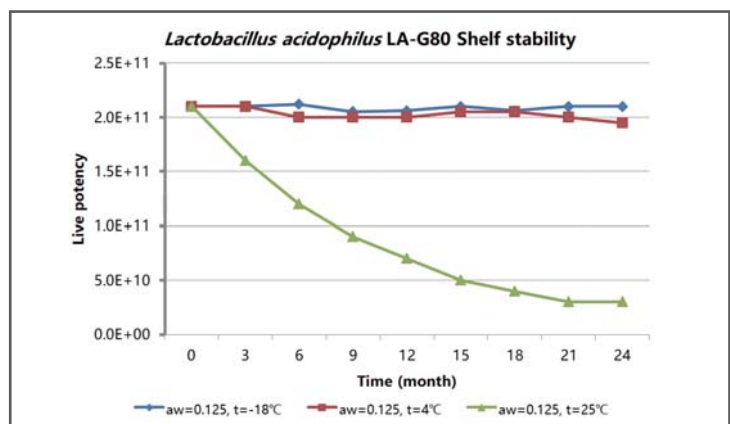
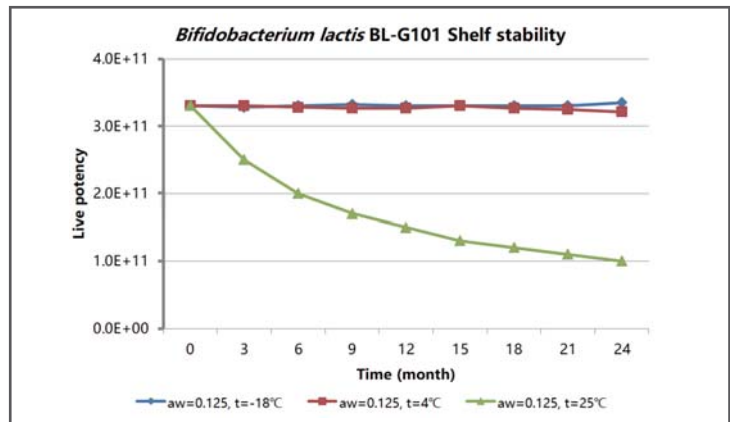
## Remarks:

- (1) Strains species are genetically identified.
- (2) Types of probiotic blends/premix could be provided based on client's requirements.
- (3) Tyndalized (Heat-Killed) specification could be provided based on client's requirements.
- (4) Complete data sheet is available based on the client's requirement.
- (5) For professional use only, not intended to consumers.



# Typical strain's quality indicators and stability

Items	Specification
1. Appearance	Off-white or light yellow powder
2. Genetic Identification	16s-rRNA method etc.
3. IDA deposit number	CCTCC M 2013336
4. Live <i>Bifidobacterium lactis</i> potency	$\geq 5.0 \times 10^{11}$ CFU/g
5. Water content	$\leq 5.0\%$
6. Non lactic acid bacteria	$\leq 500$ CFU/g
(1) Coliforms	$\leq 10$ CFU/g
(2) Bacillus	$\leq 50$ CFU/g
(3) Enterococcus	$\leq 35$ MPN
(4) Moulds, Yeasts	$\leq 10$ CFU/g
7. Pathogenic bacteria	
(1) <i>Shigella</i>	Negative
(2) <i>Salmenella</i>	Negative
(3) <i>Staphylococcus aureus</i>	Negative
8. Heavy metals	
(1) Lead	$\leq 1$ ppm
(2) Arsenic	$\leq 0.5$ ppm



## Supporting documents:

- ◆ Genetic identification report
- ◆ IDA deposit certificate
- ◆ Certificate of analysis
- ◆ Stability study report
- ◆ Anti-bile salts & Anti-gastric acid study reports
- ◆ Antibiotic sensitivity test certificate
- ◆ Safety study report
- ◆ Microbial enumeration method

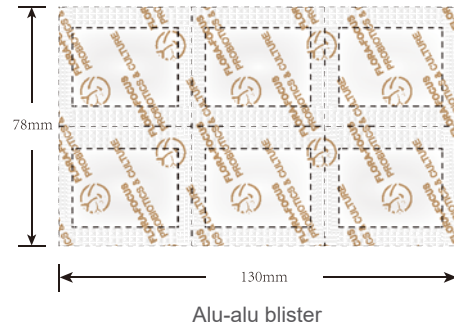


# Package Systems

## ● Capsules

Types		Descriptions		
Capsule shell	Vegetable capsules (HPMC)			
	Acid-resistant vegetable capsules (DRCaps)			
	Gelatin capsules			
Outer packing	Bottles	PET bottles		
		Glass bottles		
	Blister	Size #0	Cold forming Alu-Alu blisters (10's/blister, 146mm*95mm)	
			PVC/PVDC blisters (10's/blister, 95mm*62mm)	
		Size #2	Alu-Alu blister (6's/blister, 130mm*78mm)	

\* Other capsule sizes are available on inquiry.



## ● Sachets

Packing weight	Type	Size	Packing material
1.0~3.5 gram	Back-sealed sachets	110mm*25mm	PE/Alu/PET
	Three-sides sealed rectangular sachet	75mm*50mm	
3.5~5.0 gram	Back-sealed sachets	120mm*28mm	
	Three-sides sealed rectangular sachet	85mm*50mm	
5.0~10.0 gram	Back-sealed sachets	145mm*28mm	
	Three-sides sealed rectangular sachet	100mm*50mm	
20~40 gram	Back-sealed sachets	180mm*70mm	



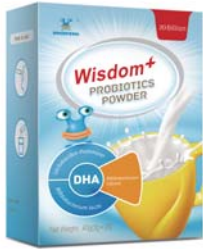
Back-sealed sachets



Three-sides sealed rectangular sachet



# Probiotics for Children



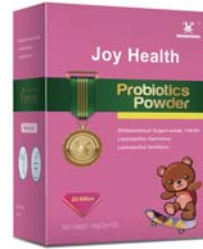
## Wisdom+ Live Probiotic Powder

### Spec:

- 20 Billion,
- 2.0g sachet

### Benefits

- Intestinal flora balance
- Promotes intellectual development
- Promotes nutrient absorption
- Immunity boost



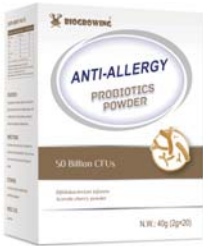
## Joy Health Probiotic Powder

### Spec:

- 20 Billion,
- 2.0g sachet

### Benefits

- Promotes digestion and absorption
- Micro-nutrient supplementation
- Alleviates chronic malnutrition



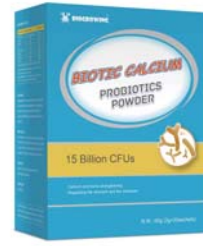
## Anti-allergy Live Probiotic Powder

### Spec:

- 50 Billion,
- 2.0g sachet

### Benefits

- Relieves allergic symptoms
- Strengthens immunity



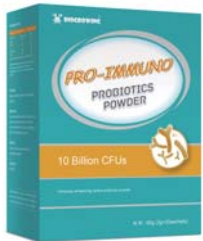
## Biotic Calcium Live Probiotic Powder

### Spec:

- 15 Billion,
- 2.0g sachet

### Benefits

- Calcium and bone strengthening
- Regulates the stomach and the intestines



## Pro-Immuno Live Probiotic Powder

### Spec:

- 10 Billion,
- 2.0g sachet

### Benefits

- Immunity enhancing



## Kids Care Live Probiotic Powder

### Spec:

- 10 Billion,
- 2.0g sachet

### Benefits

- Intestinal flora balance
- Immunity enhancing



## Biotic Restore Live Probiotic Powder

*WHO recommended formula*

### Spec:

- 10 Billion,
- 5.5g sachet

### Benefits

- Relieves acute diarrhea
- Alleviates dehydration



## Biotic Plus Capsule

### Spec:

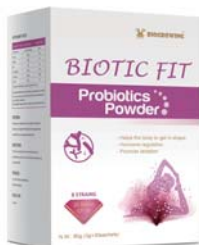
- 20 Billion,
- 250mg capsule

### Benefits

- Diarrhea relief
- Digestion health
- Absorption boost
- Prevents picky eating

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.

# Probiotics for Women



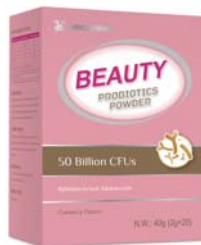
## Biotic Fit Live Probiotic Powder

### Spec:

- 20 Billion,
- 3.0g sachet

### Benefits

- Weight management



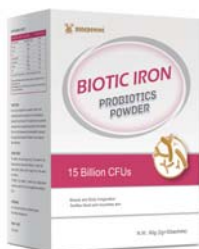
## Beauty+ Live Probiotic Powder

### Spec:

- 50 Billion,
- 2.0g sachet

### Benefits

- Female genitourinary care
- Relieves constipation
- Regulates the intestinal flora



## Biotic Iron Live Probiotic Powder

### Spec:

- 15 Billion,
- 2.0g sachet

### Benefits

- Beauty and body invigoration
- Tonifies blood and nourishes skin



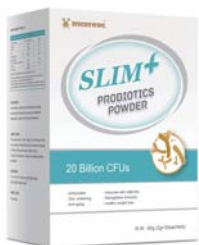
## Postpartum Live Probiotic Powder

### Spec:

- 50 Billion,
- 3.0g sachet

### Benefits

- Helps with the healing of the genitourinary system after delivery
- Regulates the intestinal flora
- Adjusts the endocrine system
- Skin care



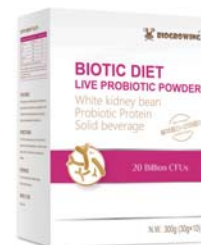
## Slim+ Live Probiotic Powder

### Spec:

- 20 Billion,
- 2.0g sachet

### Benefits

- Antioxidant
- Skin whitening
- Anti-aging
- Improves skin elasticity
- Strengthens immunity
- Healthy weight loss



## Biotic Diet Live Probiotic Powder (Protein Solid Beverage)

### Spec:

- 30 Billion,
- 3.0g sachet

### Benefits

- Weight management
- Rich in protein and dietary fiber



## Female Care Capsules

### Spec:

- 10 Billion,
- 500mg capsule

### Benefits

- Reproduction system health
- Diarrhea relief
- Absorption boost
- Digestion health



## Vaginbiol Capsules

### Spec:

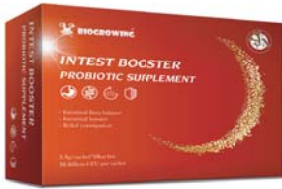
- 20 Billion,
- 500mg capsule

### Benefits

- Support vaginal health

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.

# Probiotics for Adults



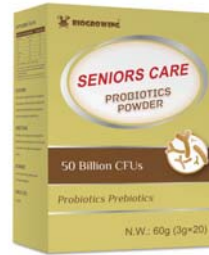
## Intest Booster Live Probiotic Powder

### Spec:

- 30 Billion,
- 3.5g sachet

### Benefits

- Improves intestinal motility
- Enhances digestion and absorption



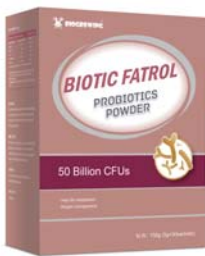
## Seniors Care Live Probiotic Powder

### Spec:

- 50 Billion,
- 2.0g sachet

### Benefits

- Relieves Irritable bowel syndrome, chronic gastritis, intestinal inflammation



## Biotic Fatrol Live Probiotic powder

### Spec:

- 50 Billion,
- 5.0g sachet

### Benefits

- Helps fat metabolism
- Weight management



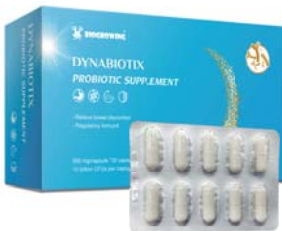
## IBS Care Capsules

### Spec:

- 30 Billion,
- 500mg capsule

### Benefits

- Irritable bowel syndrome relief
- Gastrointestinal flora balance



## Dynabiotics Capsules

### Spec:

- 10 Billion,
- 500mg capsule

### Benefits

- Relieves bowel discomfort
- Regulates the immunity



## Biotic-Restore Capsules

### Spec:

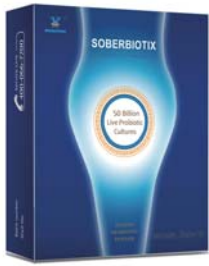
- 20 Billion,
- 500mg capsule

### Benefits

- Antibiotic-Associated Diarrhea relief
- Intestinal flora balance

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.

# Probiotics for Adults



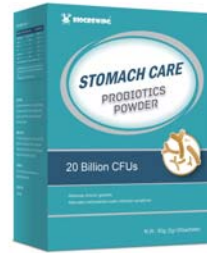
## Soberbiotix Probiotic Powder

### Spec:

- 50 Billion,
- 2.0g sachet

### Benefits

- Liver protection
- Dispers the effects of alcohol



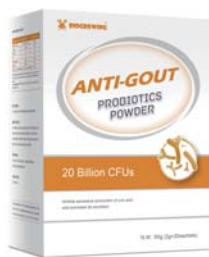
## Stomach Care Live Probiotic Powder

### Spec:

- 20 Billion,
- 2.0g sachet

### Benefits

- Relieves Irritable bowel syndrome, chronic gastritis, intestinal inflammation



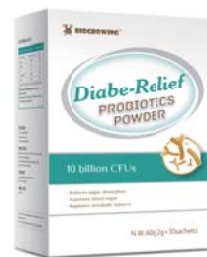
## Anti-Gout Live Probiotic Powder

### Spec:

- 20 Billion,
- 2.0g sachet

### Benefits

- Inhibits excessive production of uric acid and promotes its excretion



## Diabe-Relief Live Probiotic Powder

### Spec:

- 10 Billion,
- 2.0g sachet

### Benefits

- Relieves blood sugar pressure
- Relieves metabolic absorption of Diabetes type II



## Anti-Anxiety Capsules

### Spec:

- 10 Billion,
- 500mg capsule

### Benefits

- Anxiety relief
- Mental health care



## Omebiotix Capsules

### Spec:

- 40 Billion,
- 500mg capsule

### Benefits

- Blood lipid regulation
- Anti-inflammatory

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.

# [The Shining Essence] Healthcare Probiotics Products



## ● SHINING ESSENCE CAPSULE

CFDA Registration No.:

卫食健字(2000)第0358号

Approved Health Claim:

Improving gastrointestinal function (bowel relaxing) auxiliary treatment to the chemical liver Injuries

Main Ingredients:

*Lactobacillus acidophilus* LA- G80

*Bifidobacterium bifidum* BB- G90

Skimmed milk powder, Lactose, Pectin.

Applicant:

People with constipation or in high risks of exposing to the chemicals

Package specification:

Standard package: 210 mg/capsule \* 18/60/90 capsules

Gift package: 210 mg/capsule \* 6 capsules/box \* 8 boxes

Shelf life:

24 months, store in a cool and dry place



## ● SHINING GASTRIC PROTECTION CAPSULE

CFDA Registration No.:

国食健字G20041228

Approved Health Claim:

Auxiliary protection to the gastric mucosa

Main Ingredients:

Hericium erinaceus extract

*Lactobacillus acidophilus* LA- G80

Applicant:

Adults with Gastric mucosa impairments, one capsule per time, twice per day.

Package specification:

Standard package: 180 mg/capsule \* 18/60/90 capsules

Gift package: 180 mg/capsule \* 6 capsules/box \* 8 boxes

Shelf life:

24 months, store in a cool and dry place



## ● SHINING SICANEL CAPSULE

CFDA Registration No.:

国食健字G20050224

Approved Health Claim:

Blood lipid regulation

Main Ingredients:

Red Rice

*Lactobacillus acidophilus* LA- G80

Applicant:

High blood lipid patients, adults, two capsules per time, twice per day.

Package specification:

Standard package: 200 mg/capsule \* 18/60/90 capsules

Gift package: 200 mg/capsule \* 6 capsules/box \* 8 boxes

Shelf life:

24 months, store in a cool and dry place

# Probiotic yoghurt starter culture

BioGrowing homemade probiotic yoghurt starter culture is 100% natural.



## 2 Probiotic Yoghurt Starter Culture

Ingredients: *Streptococcus thermophilus*, *Lactobacillus bulgaricus*, Vitamin C, Vitamin B1, Zinc gluconate, Calcium lactate, Maltodextrin

Product standard: 2.0 grams/bag, 10 bags/pack

Application: Homemade yoghurt starter culture; Oral supplements

Recommended dosage: 2.0 grams for 1 liter of fresh yoghurt preparation; 2.0 grams per day for oral supplements

Shelf life: 18 months when stored below 0°C; 12 months in a cool and dry place

NON-GMO: To the best of our knowledge, no ingredients of any of the products produced by BioGrowing are derived from genetically modified organisms.



## 5 Probiotic Yoghurt Starter Culture

Ingredients: *Streptococcus thermophilus*, *Lactobacillus bulgaricus*, *Bifidobacterium lactis*, *Bifidobacterium bifidum*, *Bifidobacterium longum*, Vitamin C, Vitamin B1, Zinc gluconate, Calcium lactate, Maltodextrin, Fructo-oligosaccharide

Product standard: 2.0 grams/bag, 10 bags/pack

Application: Homemade yoghurt starter culture; Oral supplements

Recommended dosage: 2.0 grams for 1 liter of fresh yoghurt preparation; 2.0 grams per day for oral supplements

Shelf life: 18 months when stored below 0°C; 12 months in a cool and dry place

NON-GMO: To the best of our knowledge, no ingredients of any of the products produced by BioGrowing are derived from genetically modified organisms.



## 7 Probiotic Yoghurt Starter Culture

Ingredients: *Streptococcus thermophilus*, *Lactobacillus bulgaricus*, *Bifidobacterium lactis*, *Lactobacillus plantarum*, *Lactobacillus acidophilus*, *Lactobacillus casei*, *Lactobacillus rhamnosus*, Vitamin C, Vitamin B1, Zinc gluconate, Calcium lactate, Maltodextrin

Product standard: 2.0 grams/bag, 10 bags/pack

Application: Homemade yoghurt starter culture; Oral supplements

Recommended dosage: 2.0 grams for 1 liter of fresh yoghurt preparation; 2.0 grams per day for oral supplements

Shelf life: 18 months when stored below 0°C; 12 months in a cool and dry place

NON-GMO: To the best of our knowledge, no ingredients of any of the products produced by BioGrowing are derived from genetically modified organisms.



## 8 Probiotic Yoghurt Starter Culture

Ingredients: *Streptococcus thermophilus*, *Lactobacillus bulgaricus*, *Bifidobacterium lactis*, *Lactobacillus plantarum*, *Lactobacillus acidophilus*, *Lactobacillus casei*, *Lactobacillus rhamnosus*, *Lactobacillus reuteri*, Vitamin C, Vitamin B1, Zinc gluconate, Calcium lactate, Maltodextrin

Product standard: 2.0 grams/bag, 10 bags/pack

Application: Homemade yoghurt starter culture; Oral supplements

Recommended dosage: 2.0 grams for 1 liter of fresh yoghurt preparation; 2.0 grams per day for oral supplements

Shelf life: 18 months when stored below 0°C; 12 months in a cool and dry place

NON-GMO: To the best of our knowledge, no ingredients of any of the products produced by BioGrowing are derived from genetically modified organisms.



## Probiotics for Kids Yoghurt Starter Culture

Ingredients: *Streptococcus thermophilus*, *Lactobacillus bulgaricus*, *Bifidobacterium lactis*, *Bifidobacterium infantis*, Fructo-oligosaccharide, DHA, Vitamin C, Vitamin B1, Zinc gluconate, Calcium lactate, Maltodextrin

Product standard: 2.0 grams/bag, 10 bags/pack

Application: Homemade yoghurt starter culture; Oral supplements

Recommended dosage: 2.0 grams for 1 liter of fresh yoghurt preparation; 2.0 grams per day for oral supplements

Shelf life: 18 months when stored below 0°C; 12 months in a cool and dry place

NON-GMO: To the best of our knowledge, no ingredients of any of the products produced by BioGrowing are derived from genetically modified organisms.



## Yoghurt Maker Yoghurt Starter Culture

### Prepare probiotic yoghurt by yourself

1. Take the starter culture out of the refrigerator and keep it at the room temperature for 15 minutes before preparation.
2. Pour 1000 ml of pure milk into a clean sealed box (or bowl). Add the starter culture into the milk and disperse evenly. Once dispersed, close the box with its cover.
3. Allow the milk to ferment by keeping the sealed box at a temperature 38 - 42°C for 6 - 10 hours.
4. Put the fermented milk into the refrigerator to stop any further fermentation. If the milk is fermented for more or less than the prescribed time range, the yoghurt will not taste good.
5. Enhance yoghurt's taste by adding honey or fruits. Share the joy of myriad flavors with your family and friends!

Probiotic fermentation | No preservatives | No stabilizer | No thickener



Strawberry Yoghurt Powder

Ingredients:  
Whole milk powder, Sugar,  
Strawberry powder  
*Lactobacillus acidophilus*,  
*Bifidobacterium lactis*  
*Lactobacillus bulgaricus*,  
*Streptococcus thermophilus*

Specification: 225 grams/bag  
One bag prepares 1000 ml of probiotic yoghurt

Storage: In a cool and dry place  
Shelf life: 18 months



Mango Yoghurt Powder

Ingredients:  
Whole milk powder, Sugar,  
Mango powder  
*Lactobacillus acidophilus*,  
*Bifidobacterium lactis*  
*Lactobacillus bulgaricus*,  
*Streptococcus thermophilus*

Specification: 225 grams/bag  
One bag prepares 1000 ml of probiotic yoghurt

Storage: In a cool and dry place  
Shelf life: 18 months



Blueberry Yoghurt Powder

Ingredients:  
Whole milk powder, Sugar,  
Blueberry flavors  
*Lactobacillus acidophilus*,  
*Bifidobacterium lactis*  
*Lactobacillus bulgaricus*,  
*Streptococcus thermophilus*

Specification: 225 grams/bag  
One bag prepares 1000 ml of probiotic yoghurt

Storage: In a cool and dry place  
Shelf life: 18 months



Wisdom+ Yoghurt Powder

Ingredients:  
Whole milk powder, Sugar, Taurine,  
Zinc Gluconate, Vitamin A  
*Streptococcus thermophilus* ST-G30  
*Lactobacillus bulgaricus* LB-G40  
*Bifidobacterium longum* BL-G301  
*Lactobacillus reuteri* LR-G100  
*Bifidobacterium lactis* BL-G101  
*Lactobacillus paracasei* Lp-G110  
*Lactobacillus salivarius* LS-G60

Specification: 225 grams/bag  
One bag prepares 1000 ml of probiotic yoghurt

Storage: In a cool and dry place  
Shelf life: 18 months



Beauty+ Yoghurt Powder

Ingredients:  
Whole milk powder, Sugar, Fish collagen peptide  
*Streptococcus thermophilus* ST-G30  
*Lactobacillus bulgaricus* LB-G40  
*Bifidobacterium bifidum* BB-G90  
*Bifidobacterium adolescentis* BQ-G50  
*Bifidobacterium breve* BB-G95  
*Lactobacillus plantarum* Lp-G18  
*Lactobacillus rhamnosus* Lr-G14

Specification: 225 grams/bag  
One bag prepares 1000 ml of probiotic yoghurt

Storage: In a cool and dry place  
Shelf life: 18 months



Protect+ Yoghurt Powder

Ingredients:  
Whole milk powder, Sugar, Turmeric powder  
*Streptococcus thermophilus* ST-G30  
*Lactobacillus bulgaricus* LB-G40  
*Lactobacillus gasserii* LG-G12  
*Lactobacillus johnsonii* LJ-G55  
*Bifidobacterium bifidum* BB-G90  
*Lactobacillus acidophilus* LA-G80  
*Lactobacillus rhamnosus* Lr-G14

Specification: 225 grams/bag  
One bag prepares 1000 ml of probiotic yoghurt

Storage: In a cool and dry place  
Shelf life: 18 months

## ♥️ HOMEMADE YOGHURT HOMEMADE LOVE



### How to make homemade yoghurt

Fill the yoghurt maker container with warm water (<math><45^{\circ}\text{C}</math>) to the half of its capacity.

1. Add yoghurt powder.
2. Mix the water and the yoghurt powder well.
3. Add more water to fill in the container.
4. Maintain the temperature at  $43^{\circ}\text{C}$  for 6-10 hours and your fresh yoghurt will be ready. Store the yoghurt in the refrigerator for an improved taste.

\*Yoghurt maker is the machine that can maintain a stable fermentation temperature of  $43^{\circ}\text{C}$ .



### Soybean based Probiotic Yoghurt Powder

- ⊙ 6 Probiotic strains
- ⊙ Mellow soy flavor
- ⊙ Probiotics potency can reach 50 billion CFU/100g at the end of the fermentation

#### Ingredients:

Instant soybean powder (non-GMO soybeans, maltose syrup, white sugar), *Streptococcus thermophilus* ST-G30, *Lactobacillus bulgaricus* LB-G40, *Lactobacillus paracasei* LPC-G110, *Lactobacillus rhamnosus* Lr-G14, *Bifidobacterium lactis* BL-G101, *Lactobacillus plantarum* Lp-G18

Package: 196g/bag x 6

Storage: In a cool and dry place. Avoid sunlight.

Shelf life: 18 months.



# Bioguard® Starter Cultures (For Industrial Use)

Product type	Culture's composition													Characters					
	ST	LB	LL.L	LL.C	LA	BL	LC	LPc	Lr	LR	LF	Lp	Fermentation speed	Viscosity	Flavor	Thickness	Post-acidity		
DVS Starter Culture	<b>Thermophilic dairy starter cultures</b>																		
	GF 231	+	+											★★★	★★	★★★★	★	★★★	
	GF 468	+	+											★★★★	★★★★	★★	★★	★★★	
	GF 479	+	+											★★★★	★★	★★★★	★★★★	★★	
	GF 655	+	+											★★★★	★★	★★★★	★★★★	★★	
	GF 665	+	+											★★★★	★★★★	★★★★	★★★★	★★	
	GF 669	+	+											★★★★	★★★★	★★★★	★★★★	★★★	
	GF 686	+	+											★★★★	★★★★	★★★★	★★★★	★★★	
	GF 867	+	+											★★★★	★★★★	★★	★★★★	★★	
	GF 868	+	+											★★	★★★★	★★★★	★★★★	★★	
	GF 967	+	+											★★★★	★★★★	★★	★★★★	★★	
	<b>Mesophilic dairy starter cultures</b>																		
	GF 214			+											★	★★	★	★	★★
	GF 215				+										★	★★	★	★	★★
	GF 218			+	+										★	★★	★	★	★★
	GF 227	+		+	+										★★	★★	★★	★★	★★
	GF 927	+		+	+										★★★★	★★★★	★★	★★★★	★★★
	<b>Probiotic yoghurt &amp; beverage starter cultures</b>																		
	GFY 111					+	+								★★	★	★★★★★	★★	★★★
GFY 112					+	+			+					★★	★	★★★★	★★★	★★★	
GFY 611	+				+	+								★★★★★	★★★★	★★★★	★★★★	★★★	
GP 101								+	+			+		★★	★	★★★★	★★★	★★★	
GFY 114					+	+		+	+			+		★★	★	★★★★	★★★	★★★★	
GFY 116					+	+	+	+	+			+		★★★★	★	★★★★	★★★	★★★★	
GFY 119			+	+	+	+	+	+	+	+	+	+		★★★★	★	★★★★	★★★	★★★	
DVS Probiotic Starter Culture	<b>Drinking yoghurt starter cultures</b>																		
	GF 101							+						For Drinking yoghurt(Yakult type)					
	GF 201		+					+											
	<b>Sour beer starter culture</b>																		
	LactoSour		+	+		+				+			+	Data sheet available on requests					
	<b>Vegetable &amp; fruit starter culture</b>																		
	LactoV&F							+		+			+	Data sheet available on requests					
	<b>Biological protective agents</b>																		
	GP 101								+	+			+	Inhibit the growth of molds and yeast, to prolong the shelf life.					
	DVS Plant Based Starter Culture	<b>Plant based starter cultures</b>																	
GS 485		+	+																
GC101								+	+			+	Data sheet available on requests						
NP108						+						+							

Remark:

(1)Thermophilic starter culture: Culture fermentation temperature range preferred at 37°C~44°C.

(2)Mesophilic starter culture: Culture fermentation temperature range preferred at 25°C ~37°C.

(3)ST: *Streptococcus thermophilus*, LB: *Lactobacillus delbrueckii* subsp. *bulgaricus*; LL.L: *Lactococcus lactis* subsp. *lactis*; LL.C: *Lactococcus lactis* subsp. *cremoris*; LA: *Lactobacillus acidophilus*; BL: *Bifidobacterium lactis*; LC: *Lactobacillus casei*; LPc: *Lactobacillus paracasei*; Lr: *Lactobacillus rhamnosus*; LR: *Lactobacillus reuteri*; LF: *Lactobacillus fermentum*; Lp: *Lactobacillus plantarum*.

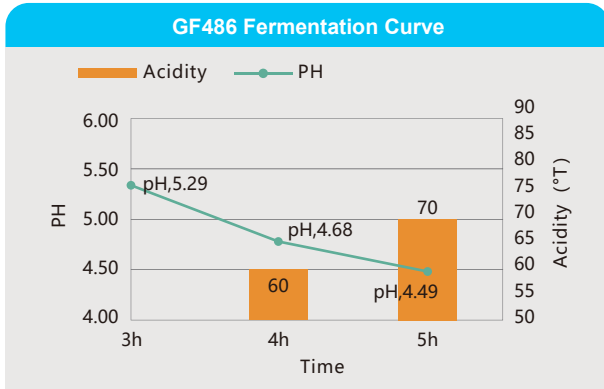
Characters: ★ - Very Low ★★ - Low; ★★★ - Medium; ★★★★ - High; ★★★★★ - Very High.

## Starter Culture GF486

*Streptococcus thermophilus*  
*Lactobacillus bulgaricus*

### Specification:

Net content: 55g/bag  
Batch size: 200U/bag, 1000L of milk



### Remarks

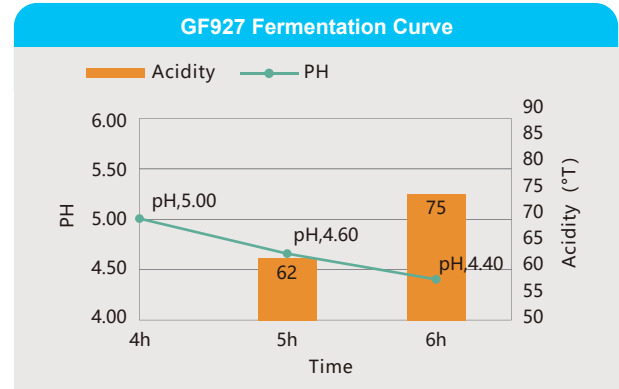
- 10% whole milk powder reconstituted milk was used as a basis for this fermentation. Fermentation conditions: 2.5% reconstituted milk protein; 6% sucrose; sterilized at 95°C for 5 minutes.
- Inoculation amount: 200U/ton; temperature for fermentation: 42°C.
- The fermentation curve shown in this chart is measured under experimental conditions and is for reference only. Due to the difference in milk source, protein content, and equipment conditions, it will be inconsistent with the chart. Please contact our service personnel for more data.

## Starter Culture GF927

*Lactococcus lactis subsp. lactis*  
*Lactococcus lactis subsp. cremoris*  
*Streptococcus thermophilus*

### Specification:

Net content: 35g/bag  
Batch size: 200U/bag, 1000L of milk



### Remarks

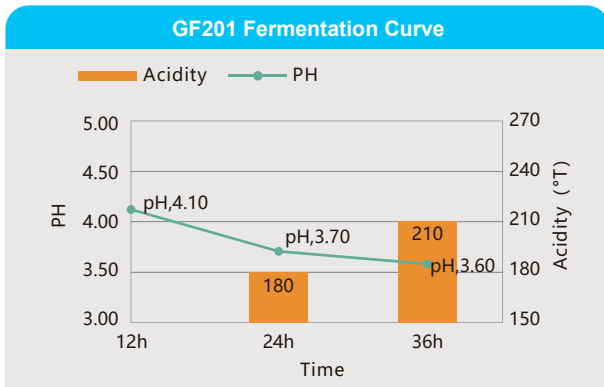
- 10% whole milk powder reconstituted milk was used as a basis for this fermentation. Fermentation conditions: 2.5% reconstituted milk protein; 6% sucrose; sterilized at 95°C for 5 minutes.
- Inoculation amount: 200U/ton; temperature for fermentation: 37°C.
- The fermentation curve shown in this chart is measured under experimental conditions and is for reference only. Due to the difference in milk source, protein content, and equipment conditions, it will be inconsistent with the chart. Please contact our service personnel for more data.

## Starter Culture GF201

*Lactobacillus casei*  
*Lactobacillus bulgaricus*

### Specification:

Net content: 20g/bag  
Batch size: 200U/bag, 1000L of milk



### Remarks

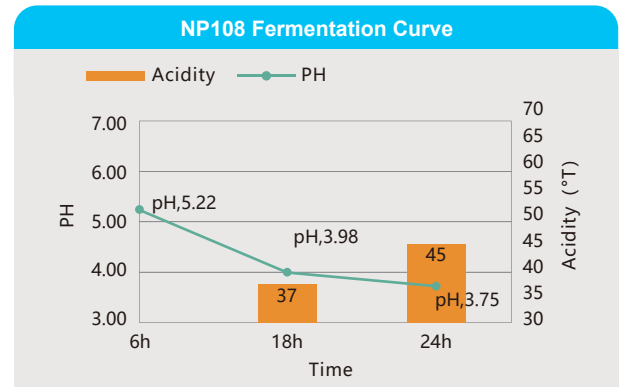
- 12% whole milk powder reconstituted milk was used as a basis for this fermentation. Fermentation conditions: 4.0% reconstituted milk protein; 2% glucose; sterilized at 95°C for 5 minutes.
- Inoculation amount: 200U/ton; temperature for fermentation: 37°C.
- The fermentation curve shown in this chart is measured under experimental conditions and is for reference only. Due to the difference in milk source, protein content, and equipment conditions, it will be inconsistent with the chart. Please contact our service personnel for more data.

## Starter Culture NP108

*Lactobacillus fermentum*  
*Lactobacillus acidophilus*

### Specification:

Net content: 20g/bag  
Batch size: 200U/bag, 1000L of milk



### Remarks

- 13% oat flour was used as a basis for this fermentation. Fermentation conditions: 2.0% oat flour protein content after dissolution; 7% sucrose; sterilized at 105°C for 10 minutes.
- Inoculation amount: 200U/ton; temperature for fermentation: 38°C.
- The fermentation curve shown in this chart is measured under experimental conditions and is for reference only. Due to the difference in milk source, protein content, and equipment conditions, it will be inconsistent with the chart. Please contact our service personnel for more data.

## Applications in Fermented Foods



### Fermented vegetables

The fermented vegetables contain vitamins, minerals, esters, a large number of active lactic acid bacteria, as well as other nutritional and functional ingredients. The fermentation process can improve the taste, fasten the production time and reduce the content of nitrite.

#### Strains

*Lactobacillus rhamnosus* Lr-G14

*Lactobacillus casei* LC-G11

*Lactobacillus plantarum* Lp-G18



### Fermented grains

Through the fermentation process, macromolecular substances, such as starch and beta-glucans, can be converted into small molecules like polysaccharides, which are easy to digest. A large number of essential amino acids, short-chain fatty acids and other nutrients are also produced during fermentation, which will later improve the intestinal environment.

#### Strains

*Lactobacillus plantarum* Lp-G18

*Lactobacillus acidophilus* LA-G80



### Fermented Vegetable & Fruit juice

A large number of metabolites are produced through juice & vegetables fermentation, such as amino acids and short-chain fatty acids, which will later improve the intestinal environment.

#### Strains

*Lactobacillus plantarum* Lp-G18

*Lactobacillus rhamnosus* Lr-G14

*Lactobacillus casei* LC-G11



### Fermented Sour Beer

Sour beer is one of the oldest types of beers in the world, and is now becoming a new trend. Lactic acid bacteria fermentation on the basis of yeast fermentation brings a unique flavor to the beer.

#### Strains

*Lactobacillus acidophilus* LA-G80

*Lactobacillus plantarum* Lp-G18

*Lactobacillus bulgaricus* LB-G40

*Lactococcus lactis* LLL-G25

*Lactobacillus rhamnosus* Lr-G14



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