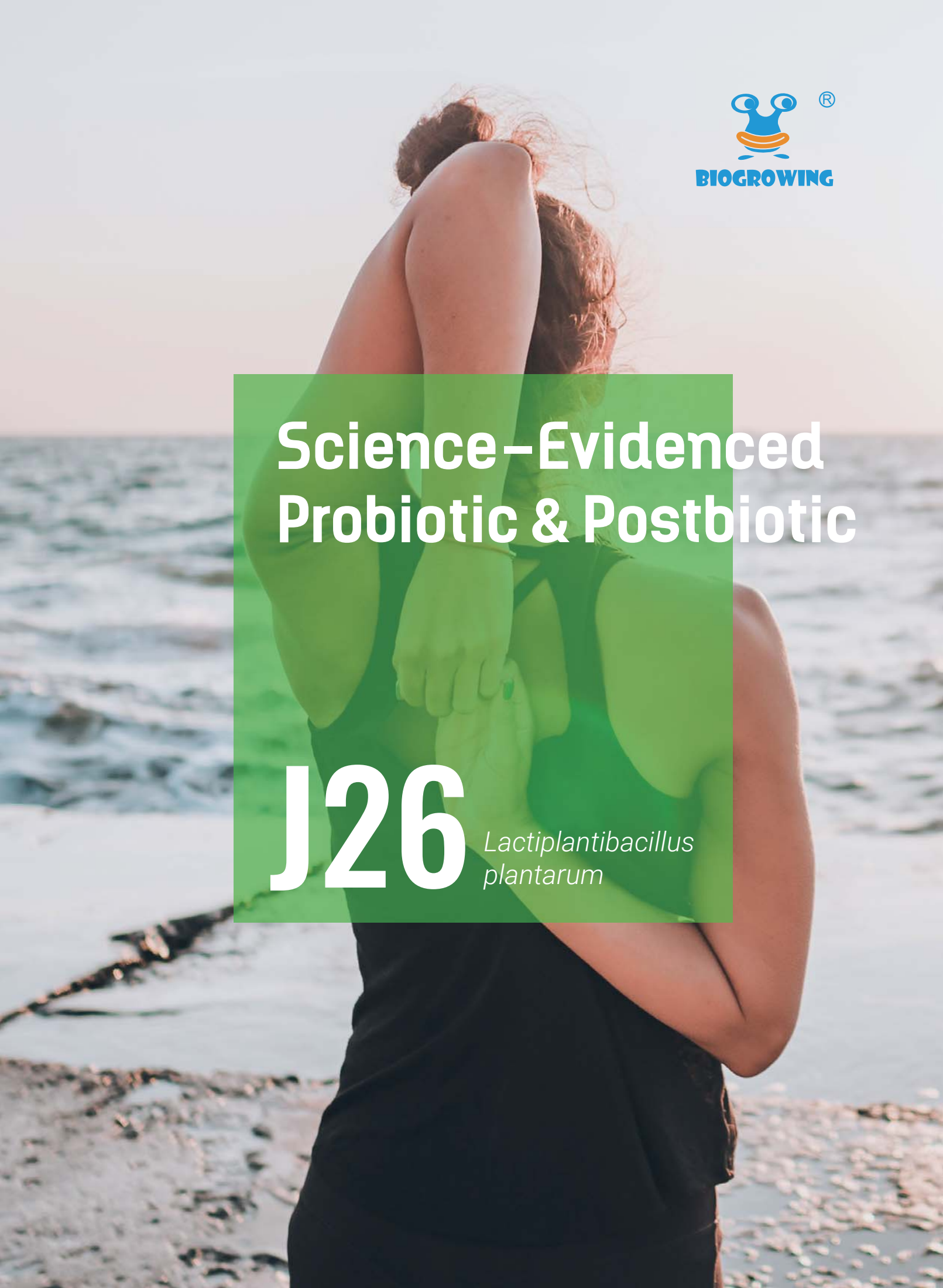


BIOGROWING®

Science-Evidenced Probiotic & Postbiotic

J26

Lactiplantibacillus plantarum



The Global Obesity Crisis & Surging Weight Management Market

1.9 Billion

1.9 billion adults worldwide will live with overweight & obesity in 2035[1]

1/4

1 in 4 people will be living with obesity by 2035[1]

100%

Childhood obesity expected to increase by 100% between 2020 and 2035[1]

Overweight/obesity closely linked to a higher risk of non-communicable diseases (NCDs)[2]

Probiotics for weight management market has grown rapidly, sustained strong expansion projected from 2023 to 2031[3] .

Scientific Rationale

Gut microbiota directly regulates: appetite & satiety, chronic low-grade inflammation, glucose/lipid metabolism, brown adipose tissue activity, energy harvest & fat storage[4].

A systematic review shows **60.87%** of trials confirm probiotics reduce BMI, weight, waist/hip circumference[5].

[1]World Obesity Federation, World Obesity Atlas 2025; World Obesity Day
[2]Institute for Health Metrics 2024, WHO Global Health Observatory 2024, World Obesity Federation 2024
[3]Market Research Intellect, Probiotics for Weight Management Market Size and Forecast
[4]Boscaini S et al., Mol Metab, 2022
[5]Tomé-Castro XM et al., Benef Microbes, 2021

Multiple Scientific Studies You Can Trust

Scientific Strength:

30+ Papers

8 Patents

1 RCT Clinical trail



8 Granted Patents

Lactiplantibacillus plantarum **J26**

Deposit Number: GDMCC NO: 62988

ZL 2024 1 0039999.4



ZL 2022 1 1279263.1



ZL 2012 1 0009973.2



ZL 2012 1 0552498.3



ZL 2023 1 0965095.X



ZL 2023 1 0013365.7



ZL 2022 1 1674861.9



ZL 2024 1 0040113.8



FBIF WOW FOOD AWARDS

2026 Best Business Innovation Award





Core Efficacy

Weight Management

(Live)

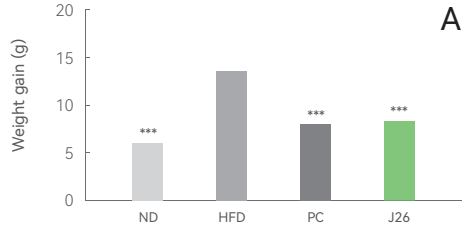
Human RCT Clinical Study
(12 weeks, 5 billion CFU/day, no diet control)

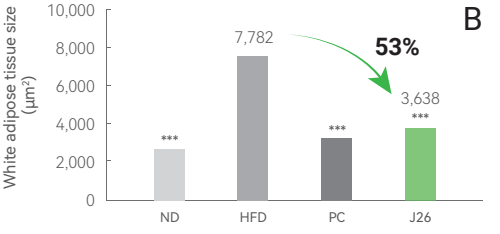
Compared with the control group:

Net BMI reduction: **0.31 kg/m²**
Net waist reduction: **1.84 cm**
Net hip reduction: **1.77 cm**
Net body fat percentage reduction: **0.92%**
Net fat mass loss: **0.89 kg**
Muscle mass increase: **0.66 kg**

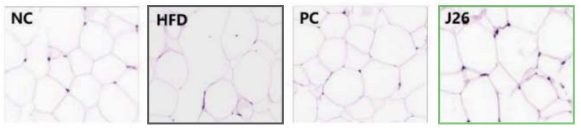
Animal Study

- Inhibits weight gain comparable to Orlistat[6] (Chart A)
- White adipocyte size reduced by ~53%, from 7782.43 um² to 3638.16 um² (p<0.001)[6] (Chart B)





- Induces browning of white adipose tissue[6]



[6] A) A Preparation Method of Encapsulated *Lactobacillus plantarum* J26 and Its Application in Weight-Loss Products. Patent No.: ZL 2024 1 0039999.4
B) Orlistat is a prescription weight-loss drug that reduces dietary fat absorption by inhibiting gastrointestinal lipase.

Core Efficacy

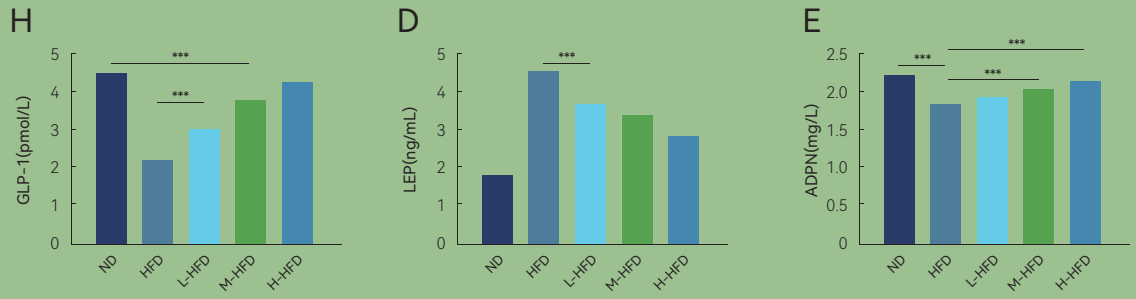
Weight Management

(Postbiotic)

Mechanism

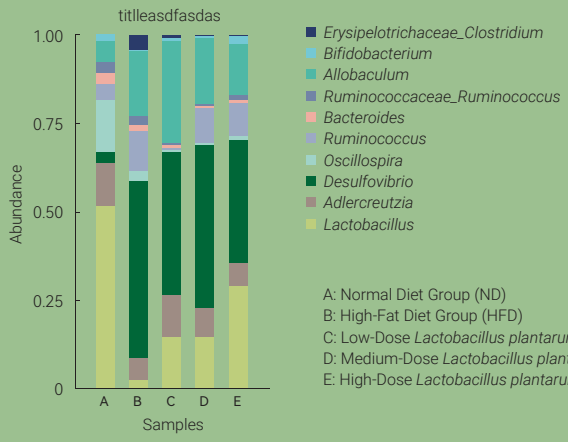
Acts via SCFAs-GPR41/GPR43 pathway[7]:

- Acetic acid **↑14.95%** | Propionic acid **↑23.89%** | Butyric acid **↑8.31%**
- Elevates GLP-1 → enhances satiety (Chart H)
- Reduces Leptin → improves resistance (Chart D)
- Increases Adiponectin → boosts metabolism (Chart E)



Animal Study

- Reduces fat accumulation[8]
- Significantly suppresses high-fat diet-induced obesity[8]
- Lowers abundance of obesity-related bacteria[7]



A: Normal Diet Group (ND)
B: High-Fat Diet Group (HFD)
C: Low-Dose *Lactobacillus plantarum* J26 Postbiotics Group (L-HFD)
D: Medium-Dose *Lactobacillus plantarum* J26 Postbiotics Group (M-HFD)
E: High-Dose *Lactobacillus plantarum* J26 Postbiotics Group (H-HFD)

[7] Miao C, Wang L, Wang H, et al. *Lactobacillus plantarum* postbiotics prepared by the combined technique of pasteurization and ultrasound: effective measures to alleviate obesity based on the SCFAs-GPR41/GPR43 signaling pathway. Food Funct. 2024;15(22):11005-11019. Published 2024 Nov 11. doi:10.1039/d4fo03591g

[8] Patent Name: A *Lactiplantibacillus plantarum* J26 Postbiotic Freeze-Dried Powder with Weight-Loss and Lipid-Lowering Effects, and Its Preparation Method and Application. Patent No.: ZL 2024 1 0040113.8

Core Efficacy

Metabolic Regulation

(Live & Postbiotic)

In Vitro Advantage

Highest cholesterol removal rate among 25 tested lactic acid bacteria strains[9].

Mechanism

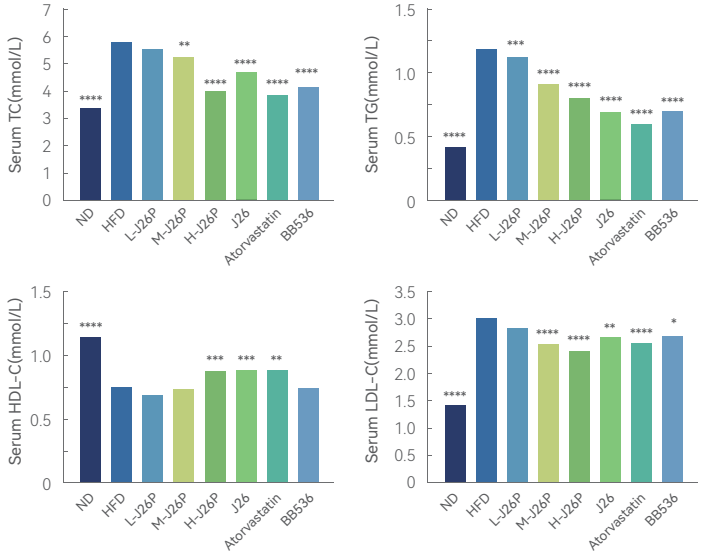
Promotes cholesterol conversion to bile acids and excretion[11]

Efficacy (Animal Study)

• Reduces serum TC, TG, LDL-C, increases HDL-C[10-12]

[Live J26] Serum LDL-C significantly decreased, Serum HDL-C significantly increased

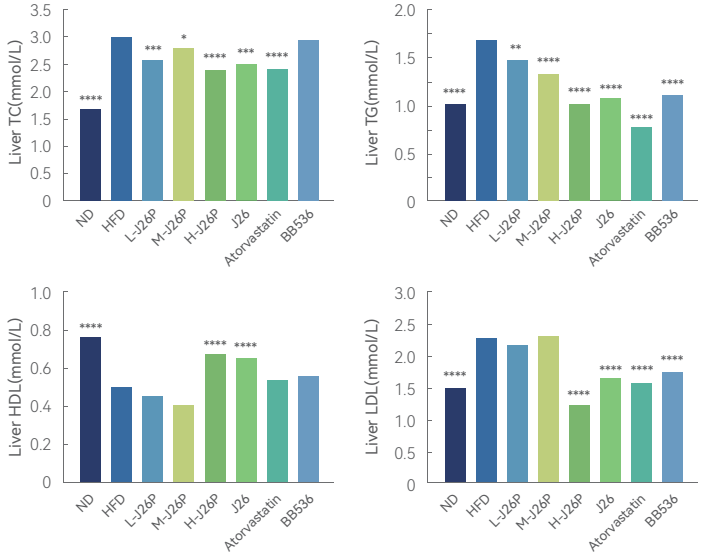
[Postbiotic] H-J26P Serum total cholesterol ↓ **28.17%**, Serum triglycerides ↓ **38.84%**, Serum LDL-C significantly decreased, Serum HDL-C significantly increased



• Reduces liver lipid accumulation[11]:

[Live J26] Liver TC, TG, LDL-C significantly decreased, Liver HDL-C ↑ **34.78%**

[Postbiotic] H-J26P liver total cholesterol ↓ **19.69%**, liver total triglycerides ↓ **37.72%**, liver high-density lipoprotein cholesterol ↑ **36.96%**, liver low-density lipoprotein cholesterol ↓ **42.88%**



[9] Screening of a cholesterol-lowering lactic acid bacterium and study of its activity in a simulated digestive environment [J] 1001-2230 (2018) 09-0004-04

[10] Patent Name: *Lactiplantibacillus plantarum* J26 Composition, Preparation Method and Use in Weight Loss Products. Patent No.: ZL 2023 1 0013365.7

[11] Zheng M, Ma M, Wang L, Yang X, Zhang Y, Man C, Zhao Q, Jiang Y. *Lactobacillus plantarum* J26 postbiotics alleviate high-fat and high-cholesterol diet-induced hypercholesterolemia via regulating the LXRα-CYP7A1-bile acid-excretion pathway. Food Frontiers. 2023;1(1):1–13.

[12] Patent Name: *Lactiplantibacillus plantarum* J26 Postbiotic Freeze-Dried Powder with Weight Loss and Hypolipidemic Efficacy, Its Preparation Method and Use. Patent No.: ZL 2024 1 0040113.8



Core Efficacy

Liver Health

(Live)

Efficacy (Animal Study)

• **Improves Alcohol-Induced Liver Injury**[13]

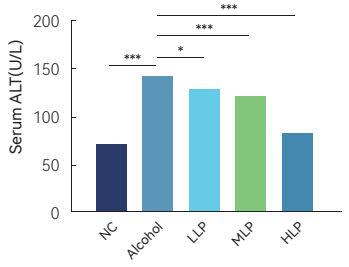
Compared with the Alcohol group, J26 reduce alcohol-induced lipid accumulation

LLP group: ALT ↓ **10.4%**, AST ↓ **13.1%**, ALP ↓ **3.7%**

MLP group: ALT ↓ **16.7%**, AST ↓ **27.6%**, ALP ↓ **8.31%**

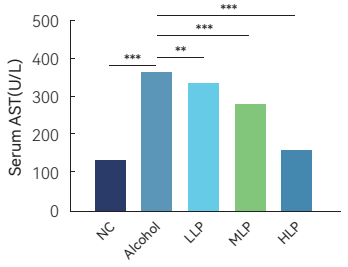
HLP group: ALT ↓ **44.61%**, AST ↓ **58.8%**, ALP ↓ **16.8%**

A



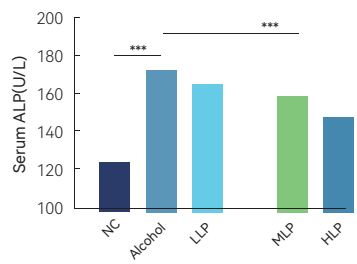
ALT: Alanine Aminotransferase;

B



AST: Aspartate Aminotransferase;

C



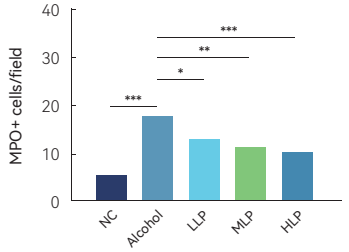
ALP: Alkaline Phosphatase

• **Antioxidant & Anti-Inflammatory**[13]

Compared with the Alcohol group, J26 reduce MPO-positive cells

MPO-positive cells: LLP ↓ **19.2%**, MLP ↓ **30.1%**, HLP ↓ **36.2%**

B



• **TNF-α, IL-1β, IL-6 significantly decreased, IL-10 increased**[13-14]

• **Protects liver mitochondria & ATP production**[14]

[13]Li, H.; Cheng, S.; Huo, J.; Dong, K.; Ding, Y.; Man, C.; Zhang, Y.; Jiang, Y. *Lactobacillus plantarum* J26 Alleviating Alcohol-Induced Liver Inflammation by Maintaining the Intestinal Barrier and Regulating MAPK Signaling Pathways. Nutrients 2023, 15, 190.

[14]Patent Name: *Lactobacillus plantarum* J26 and Its Composition for Use in Alleviating Chronic and Acute Alcohol-Induced Liver Injury. Patent No.: ZL 2022 1 1674861.9



Core Efficacy





Mood & Sleep

(Live J26)

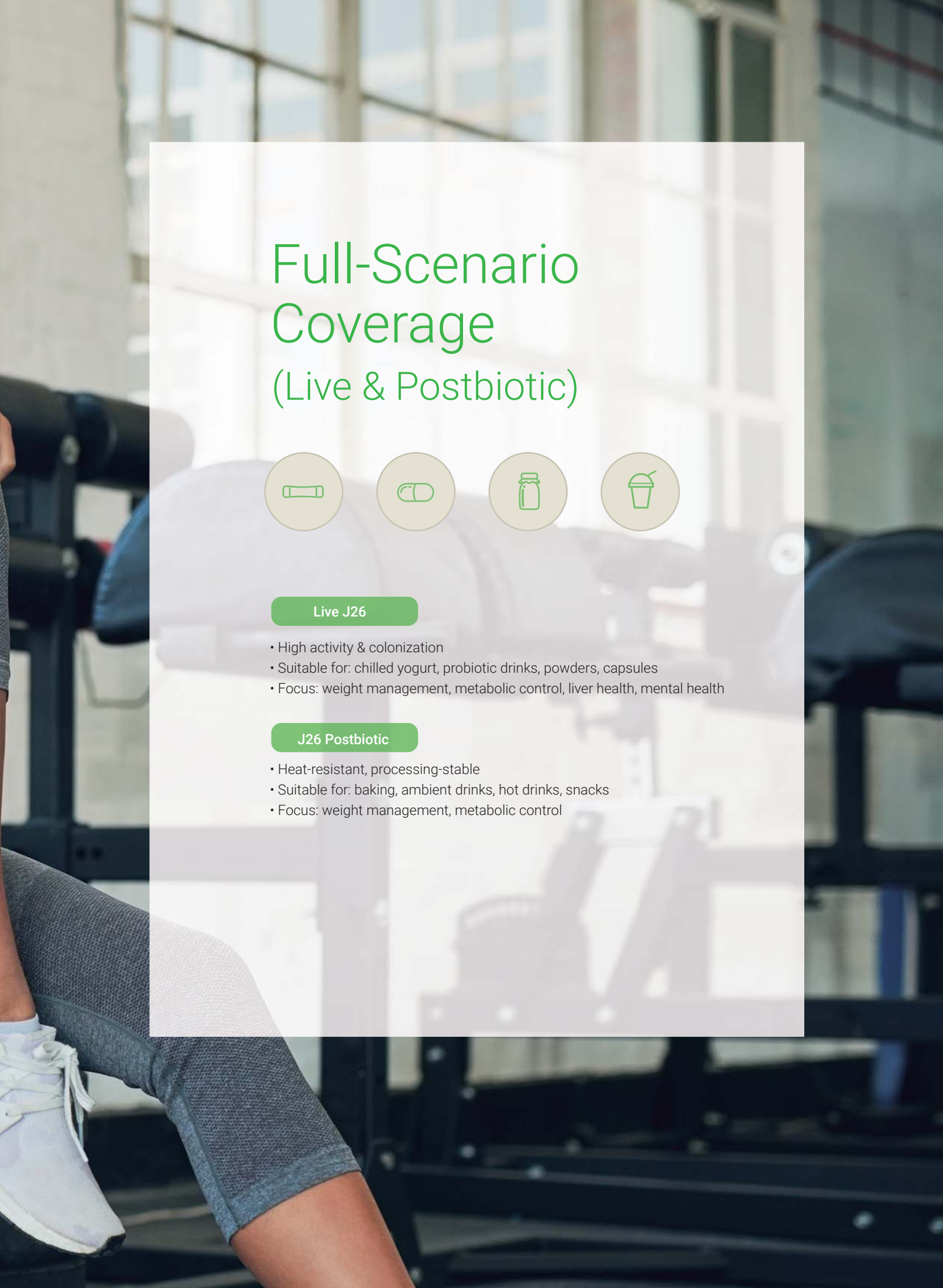
High-Yield GABA: **138 mg/L**[15]

Benefits

- Improves sleep quality
- Relieves anxiety & relaxes mood
- Regulates the gut-brain axis
- Reduces stress-induced overeating

[15]Patent Name: A Strain with High γ-Aminobutyric Acid Producing Capacity. Patent No.: ZL2012 1 0552498.3





Full-Scenario Coverage
(Live & Postbiotic)

Live J26

- High activity & colonization
- Suitable for: chilled yogurt, probiotic drinks, powders, capsules
- Focus: weight management, metabolic control, liver health, mental health

J26 Postbiotic

- Heat-resistant, processing-stable
- Suitable for: baking, ambient drinks, hot drinks, snacks
- Focus: weight management, metabolic control

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