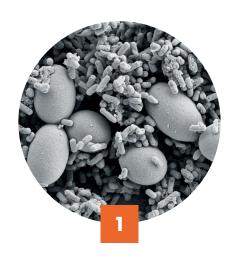


### We are a leading probiotics player inspired by developing probiotic solutions at the forefront of an expanding field. With science at the heart of everything we do, our products are supported by robust scientific documentation. We offer:



Unique strains with characterised mechanisms of action



Scientifically documented, forward-looking probiotic solutions



Premium probiotic products adapted to your market



## Therapeutic areas we address

**Gastrointestinal health** 

Cardiometabolic health

i3.1®

P. acidilactici KABP™ 021 L. plantarum KABP™ 022 L. plantarum KABP™ 023 **AB-DIGEST** 

B. longum KABP™ 042 P. pentosaceus KABP™ 041 L. rhamnosus GG **Pediatric health** 

Immune health

AB-KOLICARE®

B. longum KABP™ 042 P. pentosaceus KABP™ 041 **AB-DIGEST kids** 

B. longum KABP™ 042 P. pentosaceus KABP™ 041 L. rhamnosus GG **Oral health** 

AB-DENTALAC®

L. plantarum KABP™ 051 L. brevis KABP™ 052 P. acidilactici KABP™ 053

**DENTISANI** 

S. dentisani KABP™ 054

LIPIGO®

Saccharomyces cerevisiae postbiotic (BGCC extract)

**METAGUARD®** 

L. brevis KABP™ 052 L. plantarum KABP™ 012 L. plantarum KABP™ 013 AB-LIFE®

L. plantarum KABP™ 011 L. plantarum KABP™ 012 L. plantarum KABP™ 013 AB-DR7

L. plantarum DR7

AB21®

L. plantarum KABP<sup>TM</sup> 033 L. plantarum KABP<sup>TM</sup> 022 L. plantarum KABP<sup>TM</sup> 023 P. acidilactici KABP<sup>TM</sup> 021 **INNERIM®** 

L. plantarum KABP™ 031 L. plantarum KABP™ 032 Cognitive health

MINDBIOME®

L. plantarum DR7

MINDBIOME® PLUS

L. brevis KABP™ 052 L. plantarum KABP™ 023

**AB-IMPLALAC** 

P. acidilactici CECT 8904

P. acidilactici CECT 8906

P. pentosaceus CECT 8905

Women's health

**AB-CYSCARE** 

L. plantarum KABP™ 062 L. plantarum KABP™ 063 **GYNTIMA®** 

L. plantarum KABP™ 061

Skin health

AB-SAKEI 65®

L. sakei proBio 65

Eye health

**AB-PROTEARS®** 

L. sakei proBio 65

# Our unique strains

Strain code		Mechanism of action
Pediococcus acidilactici KABP™ 021	CECT 7483	<ul> <li>→ Antagonistic activity against FGIDs-related bacteria</li> <li>→ Synthesis of SCFA (acetate)</li> </ul>
Lactiplantibacillus plantarum KABP™ 022	CECT 7484	<ul> <li>→ Enhancement of the intestinal barrier via synthesis of poly-P granules</li> <li>→ Reduction of inflammation through the production of acetylcholine</li> <li>→ Antagonistic activity against FGIDs-related pathogenic bacteria</li> <li>→ Synthesis of SCFA (acetate)</li> </ul>
Lactiplantibacillus plantarum KABP™ 023	CECT 7485	
Lacticaseibacillus rhamnosus GG	ATCC 531033	<ul> <li>→ Strong adhesive capacity to the intestinal epithelium</li> <li>→ Modulation of the innate and adaptive immune responses</li> <li>→ Synthesis of p40 and p75 proteins, that protect the epithelial barrier, enhance intestinal cells' function and promote the production of IgA</li> <li>→ Antagonistic activity against gastrointestinal tract pathogens</li> </ul>
Bifidobacterium longum KABP™ 042	CECT 7894	<ul> <li>→ Antagonistic activity against colic-related pathogenic bacteria</li> <li>→ Digestion of HMOs, supporting a healthy gut colonisation</li> <li>→ Homofermentative metabolism (no CO₂ production)</li> <li>→ Synergic protection of intestinal epithelial barrier (tight junctions)</li> </ul>
Pediococcus pentosaceus KABP™ 041	CECT 8330	<ul> <li>→ Induction of anti-inflammatory molecules (IL-10)</li> <li>→ Homofermentative metabolism (no CO₂ production)</li> <li>→ Antagonistic activity against colic-related pathogenic bacteria</li> <li>→ Synergic protection of intestinal epithelial barrier (tight junctions)</li> </ul>
Lactiplantibacillus plantarum KABP™ 051	CECT 7481	<ul> <li>→ Effective colonization of the oral cavity, thanks to high resistance to oral conditions, good adherence to oral tissues and high ability to form aggregates</li> <li>→ Inhibition of oral pathogens associated with gingivitis and periodontitis</li> <li>→ Modulation of mucosal immunity reducing the synthesis of several inflammatory cytokines (IL-1β, IL-8)</li> </ul>
Levilactobacillus brevis KABP™ 052	CECT 7480	
Pediococcus acidilactici KABP™ 053	CECT 8633	

# Our unique strains

Strain code		Mechanism of action
Streptococcus dentisani KABP™ 054	CECT 7746	<ul> <li>→ Inhibition of 20 different bacteria species implicated in oral disease</li> <li>→ Regulation of oral pH, balancing the oral environment after a meal</li> <li>→ Synthesis of anti-inflammatory cytokine IL-10</li> </ul>
Lactiplantibacillus plantarum KABP™ 011	CECT 7527	<ul> <li>→ Modification of the enterohepatic cycle through a high BSH activity</li> <li>→ Capacity to capture intestinal cholesterol, promoting its excretion</li> </ul>
Lactiplantibacillus plantarum KABP™ 012	CECT 7528	
Lactiplantibacillus plantarum KABP™ 013	CECT 7529	
Saccharomyces cerevisiae postbiotic	BGCC extact	→ Specific <b>binding to saturated fats</b> , limiting its absorption through the intestinal wall
Lactobacillus plantarum DR7®	CECT 7481	<ul> <li>Regulation of neuroactive molecules, with effects on the serotonin-kynurenine pathway and dopamine-norepinephrine pathway</li> <li>Gut microbiota modulation, increasing bacteria diversity</li> <li>Reduction of stress-associated molecules (cortisol) plasma levels.</li> <li>Improvement of anti-inflammatory (IL-10) versus pro-inflammatory (TNF-α, IFN-γ) signals</li> <li>Antioxidative properties</li> <li>Antagonistic activity against pathogens linked with URTIs</li> </ul>
Levilactobacillus brevis KABP™ 052	CECT 7480	<ul> <li>→ Production of GABA, dopamine and acetylcholine modulating the gut-brain and gut-liver axis</li> <li>→ With GUS+ activity, helping increase blood levels of estrogens</li> </ul>
Lactiplantibacillus plantarum KABP™ 031	CECT 7315	<ul> <li>Synthesis of acetate linked with an increase in IgA (increased immune protection) and induction of T-cells</li> <li>Modulation of several anti and proinflammatory cytokines</li> <li>Reduction of TGF-β1, improving the immune response</li> </ul>
Lactiplantibacillus plantarum KABP™ 032	CECT 7316	



# Our unique strains

Strain code		Mechanism of action
Lactiplantibacillus plantarum KABP™ 033	CECT 30292	<ul> <li>→ High plnG gene activity, boosting the adaptative immune response by direct cross-talk with dendritic cells and macrophages</li> <li>→ Increased production of specific antibodies</li> </ul>
Latilactobacillus sakei proBio 65	KCTC 10755BP	<ul> <li>→ Stimulation of regulatory lymphocites, linked with an increased production of several cytokines (IL-10, IL-12, IL-17, IFN-γ)</li> <li>→ Reduction of chemokines associated with allergic responses and inflammatory processes, at systemic and local levels</li> <li>→ Antimicrobial activity against bacteria associated with atopic dermatitis</li> </ul>
Lactiplantibacillus plantarum KABP™ 062	CECT 8675	<ul> <li>→ Antimicrobial effect against uropathogenic bacteria</li> <li>→ Biofilm formation and acidification capacity, preventing overgrowth of undesirable bacteria in the urinary tract</li> </ul>
Lactiplantibacillus plantarum KABP™ 063	CECT 8677	
Lactiplantibacillus plantarum KABP™ 061	CECT 7504	<ul> <li>→ Antagonistic activity against pathogenic bacteria causing infections such as bacterial vaginosis, balancing vaginal microbiota</li> <li>→ High adhesion capacity to the vaginal epithelium</li> <li>→ Acidification of the vagina preventing overgrowth of undesirable bacteria</li> <li>→ Antimicrobial effect against Candida spp.</li> </ul>



# **Gastrointestinal health**



**i3.1**<sup>®</sup>

P. acidilactici KABP™ 021 L. plantarum KABP™ 022 L. plantarum KABP™ 023 3 billion CFU/dose

# **AB-DIGEST**

B. longum KABP™ 042 P. pentosaceus KABP™ 041 L. rhamnosus GG 6 billion CFU/dose





#### **Indications**

- → Irritable bowel syndrome (IBS)
- → Stress-related digestive disorders
- → Food intolerances (lactose and fructose)

- → For easy digestions and good intestinal transit

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Vitamin D



**CAPSULES** 



**STICKS** 



**DROPS** 

#### **Indications**

- → Antibiotic-associated diarrhea
- → Constipation
- → Gut microbiota restoration
- → Immune support

#### **Finished formulas**



→ Probiotic + Psyllum



**SHOTS** 



**STICKS** 



#### Clinical evidence

1. Lorenzo-Zúñiga V, et al. i.31, a new combination of probiotics, improves irritable bowel syndrome-related quality of life. World J. Gastroenterol. 20, 8709-8716 (2014).

- 2. Barraza-Ortiz DA, et al. Combination of a probiotic and an antispasmodic increases quality of life and reduces symptoms in patients with irritable bowel syndrome: a pilot study. Dig. Dis. (2020)
- 3. Cano-Contreras A, et al. Efficacy of probiotic i3.1 symptomatic improvement in patients with lactose intolerance. J Clin. Gastroenterol. (2020).
- 4. Lorén V, et al. Comparative effect of the i3.1 probiotic formula in two animal models of colitis. Probiotics Antimicrob. Proteins. 9, 71-80 (2017).
- 5. Perez M, et al. Derived postbiotics of a multi-strain probiotic formula clinically validated for the treatment of Irritable bowel syndrome. FASEB J. 34, 1–1 (2020).
- 6. Sato, T. et al. A probiotic blend improves defecation, mental health, and productivity in healthy Japanese volunteers under stressful situations. Heliyon 8, (2022).

#### Clinical evidence\*

- 1. Hempel S, et al. Probiotics for the prevention and treatment of antibiotic-associated diarrhea: a systematic review and meta-analysis. JAMA. 9, 1959-69 (2012).
- 2. Szajewska H, et al. Systematic review with meta-analysis: Lactobacillus rhamnosus GG in the prevention of antibiotic-associated diarrhoea in children and adults. Aliment. Pharmacol. Ther. 42, 1149-57 (2014).
- 3. Astó E, et al. Equivalence of a novel Lactobacillus rhamnosus isolate to the reference ATCC53103 strain. Poster presented at SEPyP congress (2018).
- 4. Astó E et al. Probiotic Properties of Bifidobacterium longum KABP™ 042 and Pediococcus pentosaceus KABP™ 041 Show Potential to Counteract Functional Gastrointestinal Disorders in an Observational Pilot Trial in Infants. Front Microbiol 12, (2022).
- 5. Espadaler-Mazo J et al. Bifidobacterium longum KABP042 utilizes Human Milk Oligosacharides to boost production of polyphosphate granules, strengthening intestinal barrier. Poster presented at ESPGHAN congress (2023).



# Pediatric health



# **AB-KOLICARE®**

B. longum KABP™ 042
P. pentosaceus KABP™ 041

1 billion CFU/dose



B. longum KABP™ 042
P. pentosaceus KABP™ 041
L. rhamnosus GG

6 billion CFU/dose

#### **Indications**

- → Infant colic
- → Functional gastrointestinal disorders (FGIDs) in babies and toddlers
- → For a healthy gut microbiota development during the first 1000 days

#### Finished formulas

- → Probiotic alone
- → Probiotic + HMOs
- → Probiotic + Vitamin D



#### DROPS

#### **Indications**

-> Antibiotic-associated diarrhea

**AB-DIGEST** 

- → Infectious diarrhea
- → Gut microbiota restoration
- → Immune support

#### **Finished formulas**

→ Probiotic + Inulin + Fructooligosaccharides (FOS) + Zinc



SHOTS



**STICKS** 



DROPS

#### **Clinical evidence**

- 1. Chen K. et al. Infantile colic treated with *Bifidobacterium longum* CECT7894 and *Pediococcus pentosaceus* CECT8330: A randomized, double-blind, placebo-controlled trial. Frontiers in Pediatrics 0, 939 (2021).
- 2. Asto E et al. Probiotic Properties of *Bifidobacterium longum* KABP™ 042 and *Pediococcus pentosaceus* KABP™ 041 Show Potential to Counteract Functional Gastrointestinal Disorders in an Observational Pilot Trial in Infants. *Front Microbiol* 12, (2022).
- 3. Santas JM, et al. *Pediococcus pentosaceus* CECT 8330 and *Bifidobacterium longum* CECT 7894 show a trend towards lowering infantile excessive crying syndrome in a pilot clinical trial. Int J Pharm Bio Sci. 6, 458-466 (2015).
- **4.** Tintore M, et al. Probiotic treatment with AB-KOLICARE causes changes in the microbiota which correlate with a reduction in crying time. Int. J. pharma Bio Sci. 8, 281-288 (2017).
- **5.** Dong F et al. *Pediococcus pentosaceus* CECT 8330 protects DSS-induced colitis and regulates the intestinal microbiota and immune responses in mice. *Journal of Translational Medicine* 20, 1–16 (2022).
- **6.** Espadaler-Mazo J et al. *Bifidobacterium longum* KABP042 utilizes Human Milk Oligosacharides to boost production of polyphosphate granules, strengthening intestinal barrier. Poster presented at ESPGHAN congress (2023).

#### **Clinical evidence\***

- 1. Szajewska H, et al. Meta-analysis: *Lactobacillus* GG for treating acute gastroenteritis in children--updated analysis of randomised controlled trials. Aliment Pharmacol Ther. 38, 467–76 (2013).
- 2. Szajewska H, et al. Systematic review with meta-analysis: *Lactobacillus rhamnosus* GG in the prevention of antibiotic-associated diarrhoea in children and adults. Aliment Pharmacol Ther. 42, 1149–57 (2015).
- **3.** Tintore M, et al. Probiotic treatment with AB-KOLICARE causes changes in the microbiota which correlate with a reduction in crying time. Int. J. pharma Bio Sci. 8, 281-288 (2017).
- **4.** Asto E et al. Equivalence of a novel *Lactobacillus rhamnosus* isolate to the reference ATCC53103 strain. Poster presented at SEPyP congress (2018)
- **5.** Espadaler-Mazo J et al. *Bifidobacterium longum* KABP042 utilizes Human Milk Oligosacharides to boost production of polyphosphate granules, strengthening intestinal barrier. Poster presented at ESPGHAN congress (2023).



# Oral health



# AB-DENTALAC®

L. plantarum KABP™ 051 L. brevis KABP™ 052 P. acidilactici KABP™ 053

1 billion CFU/dose

**AB-IMPLALAC** 

P. acidilactici CECT 8904
P. pentosaceus CECT 8905
P. acidilactici CECT 8906
1 billion CFU/dose

#### **Indications**

- → Gingivitis and periodontitis
- → Bad breath
- → Oral microbiota balance

#### Indications

- → Oral microbiota balance

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Vitamin D







GUMS

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Vitamin D







VIALS

#### **Clinical evidence**

1. Nart J et al. Oral colonization by *Levilactobacillus brevis* KABP 052 and *Lactiplantibacillus plantarum* KABP 051: A randomized, double-blinded, placebo-controlled trial (pilot study). J Clin Exp Dent 13, 433–439 (2021).

- 2. Montero E, et al. Clinical and microbiological effects of the adjunctive use of probiotics in the treatment of gingivitis: A randomized controlled clinical trial. J. Clin. Periodontol. 44, 708–716 (2017).
- 3. Ferrés-Amat E, et al. Probiotics diminish the post-operatory pain following mandibular third molar extraction: A randomised double-blind controlled trial (pilot study). Benef. Microbes 11, 631–639 (2020).
- **4.** Calabuig RP, et al. Oral probiotic reduces pain after third molar extraction procedure. Poster presented at SEPyP congress (2019).
- **5.** Bosch M, et al. Isolation and characterization of probiotic strains for improving oral health. Arch Oral Biol. 57, 539-349 (2012).

#### **Clinical evidence**

1. Clinical trial on-going: evaluation of the improvement of peri-implantitis state in implants treated with probiotics.

# **DENTISANI**

S. dentisani KABP™ 054

2.5 billion CFU/dose



#### **Indications**

- → Dental caries
- → Bad breath
- → Maintains a clean, plaque-free mouth

#### **Finished formulas**

- → Probiotic alone
- → Heat-inactivated strain (postbiotic)







**Clinical evidence** 

- 1. Ferrer, M. D. et al. Topic Application of the Probiotic *Streptococcus dentisani* Improves Clinical and Microbiological Parameters Associated With Oral Health. Front Cell Infect Microbiol 10, 465 (2020).
- **2.** Ferrer, M. D. et al. A pilot study to assess oral colonization and pH buffering by the probiotic *Streptococcus dentisani* under different dosing regimes. Odontology 2019 108:2 108, 180–187 (2019).
- 3. Llena, C. et al. Antimicrobial efficacy of the supernatant of Streptococcus dentisani against microorganisms implicated in root canal infections. J Oral Sci 61, 184–194 (2019).
- **4.** Esteban-Fernández, A. et al. Inhibition of oral pathogens adhesion to human gingival fibroblasts by wine polyphenols alone and in combination with an oral probiotic. J Agric Food Chem 66, 2071–2082 (2018).
- **5.** Camelo-Castillo, A., et al. *Streptococcus dentisani* sp. nov., a novel member of the mitis group. Int J Syst Evol Microbiol 64, 60–65 (2014).

#### Clinical evidence (continued)

- **6.** López-López, A. et al. Health-associated niche inhabitants as oral probiotics: The case of *Streptococcus dentisani*. Front Microbiol 8, 379 (2017).
- **7.** Esteban-Fernández, A. et al. In vitro beneficial effects of *Streptococcus dentisani* as potential oral probiotic for periodontal diseases. J Periodontol 90, 1346–1355 (2019).
- **8.** López-Santacruz, H. D. et al. *Streptococcus dentisani* is a common inhabitant of the oral microbiota worldwide and is found at higher levels in caries-free individuals. International Microbiology 2021 24:4 24, 619–629 (2021).
- **9.** Ferrer, M. D. et al. Evaluation of clinical, biochemical and microbiological markers related to dental caries. Int J Environ Res Public Health 18, (2021).
- **10.** Conrads, G. et al. Isolation and bacteriocin-related typing of *Streptococcus dentisani*. Front Cell Infect Microbiol 9, 110 (2019).

# Cardiometabolic health



#### Cardiometabolic health



L. plantarum KABP™ 011 L. plantarum KABP™ 012 L. plantarum KABP™ 013 1.2 billion CFU/dose

# **LIPIGO®**

Saccharomyces cerevisiae postbiotic (BGCC extract)

3000 mg/dose





#### **Indications**

- → Hypercholesterolemia
- → Hypertriglyceridemia
- → Maintains a healthy blood lipid profile



NUTRA

#### Finished formulas

- → Probiotic alone
- → Probiotic + Vitamin B1
- → Probiotic + Omega 3 (ALA)
- → Probiotic + Monacolin K







**STICKS** 



**DROPS** 

#### **Indications**

- → Prevents rebound effect
- → Safe weight loss
- → Overweight and type I obesity

#### **Finished formulas**

→ Postbiotic alone



#### Clinical evidence

- 1. Fuentes MC, et al. A randomized clinical trial evaluating a proprietary mixture of Lactobacillus plantarum strains for lowering cholesterol. Med. J. Nutrition Metab. 9, 125–135 (2016).
- 2. Espadaler J, et al. Demographic and clinical characteristics influencing the effects of a cholesterol-lowering probiotic. Ann. Nutr. Metab. 74, 1-31 (2019).
- 3. Bosch M, et al. Lactobacillus plantarum CECT 7527, 7528 and 7529: Probiotic candidates to reduce cholesterol levels. J. Sci. Food Agric. 94, 803-809 (2014).
- 4. Kim DH, et al. Effect of mixture of Lactobacillus plantarum CECT 7527, 7528, and 7529 on obesity and lipid metabolism in rats fed a high-fat diet. J. Korean Soc. Food Sci. Nutr. 43, 1484–1490 (2014).
- 5. Mukerji P, et al. Safety evaluation of AB-LIFE®: Antibiotic resistance and 90-day repeated-dose study in rats. Food Chem. Toxicol. 92, 117-128 (2016)
- 6. Guerrero-Bonmatty, R et al. A Combination of Lactoplantibacillus plantarum strains CECT7527, CECT7528, and CECT7529 plus monacolin K reduces blood cholesterol: Results from a randomized, double-blind, placebo-controlled Study. Nutrients 2021, Vol. 13, Page 1206 13, 1206 (2021).
- 7. Padró, T. et al. Effects of the probiotics Lactiplantibacillus plantarum KABP011, KABP012 and KABP013 on serum bile acids and metabolic profile in healthy overweight subjects. Manuscript submitted.

#### Clinical evidence

- 1. Santas J, et al. Effect of a polysaccharide-rich hydrolysate from Saccharomyces cerevisiae (LipiGO®) in body weight loss: randomised, double-blind, placebo-controlled clinical trial in overweight and obese adults. J Sci Food Agric. 97, 4250-7 (2017).
- 2. Valero-Pérez, M. et al. Regular consumption of Lipigo® promotes the reduction of body weight and improves the rebound effect of obese people undergo a comprehensive weight loss program. Nutrients 2020, Vol. 12, Page 1960 12, 1960 (2020).
- 3. Santas J, et al. Polysaccharide-rich hydrolysate from Saccharomyces cerevisiae (LipiGO®) increases fatty acid and neutral sterol excretion in guinea pigs fed with hypercholesterolemic diets. Eur J Lipid Sci Technol. 119, 17001-04 (2017).

# **METAGUARD®**

L. brevis KABP™ 052 L. plantarum KABP™ 012 L. plantarum KABP™ 013 2 billion CFU/dose



#### **Indications**

- → Non-alcoholic fatty liver disease
- → Enhances liver function reducing fat deposits

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Vitamin E
- → Probiotic + Choline





STICKS

#### Clinical evidence

1. Probiotic composition improves pathogenic components of Metabolic Associated Fatty Liver Disease (MAFLD). Manuscript under preparation.

# Immune health



AB-DR7

L. plantarum DR7
1 billion CFU/dose

# **INNERIM**®

L. plantarum KABP™ 031
L. plantarum KABP™ 032
1 billion CFU/dose



#### **Indications**

- → Upper respiratory tract infections (URTIs)
- → Respiratory health
- → Immunity support

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Vitamin D
- → Probiotic + Vitamin C
- → Probiotic + Zinc







STICKS



DROPS

#### **Indications**

- → Immunity support
- → Prevention of immunity ageing
- → Sports performance
- → Increase of power and energy levels

#### **Finished formulas**

- → Probiotic + Vitamin B9 + B6 + B12 + C + A + Zinc + Selenium
- → Probiotic + Vitamin B9 + B6 + B12 + C + A + Zinc + Selenium + CoQ10











DROPS

#### Clinical evidence

- 1. Chong HX, et al. *Lactobacillus plantarum* DR7 improved upper respiratory tract infections via enhancing immune and inflammatory parameters: A randomized, double-blind, placebo-controlled study. J. Dairy Sci. 102, 4783–4797 (2019).
- **2.** Altadill T, et al. Does *Lactoplantibacillus plantarum* DR7 reduce days of upper respiratory tract infections and fever? A post-hoc analysis of a randomized, placebo-controlled trial. FASEB Journal (2021).
- **3.** Baud D, et al. Using probiotics to flatten the curve of coronavirus disease COVID-2019. Pandemic. Front. Public Heal. 8, (2020).
- **4.** Lew LC, et al. Effects of potential probiotic strains on the fecal microbiota and metabolites of d-galactose-induced aging rats fed with high-fat diet. Probiotics Antimicrob. Proteins. 12, 545–562 (2020).

#### Clinical evidence

- 1. Mañé J, et al. A mixture of *Lactobacillus plantarum* CECT 7315 and CECT 7316 enhances systemic immunity in elderly subjects. A dose-response, double-blind, placebo-controlled, randomized pilot trial. Nutr. Hosp. 26, 228-235 (2011).
- 2. Bosch M, et al. El consumo del probiótico *Lactobacillus plantarum* CECT 7315/7316 mejora el estado de salud general en personas de edad avanzada. Nutr. Hosp. 26, 642-645 (2011).
- **3.** Bosch M, et al. *Lactobacillus plantarum* CECT 7315 and CECT 7316 stimulate immunoglobulin production after influenza vaccination in elderly Nutr. Hosp. 27, 504–509 (2012).
- **4.** Vilahur G, et al. *Lactobacillus plantarum* CECT 7315/7316 intake modulates the acute and chronic innate inflammatory response. Eur. J. Nutr. 54, 1161–1171 (2015).
- **5.** Bosch M, et al. Probiotic properties of *Lactobacillus plantarum* CECT 7315 and CECT 7316 isolated from faeces of healthy children. Lett. Appl. Microbiol. 54, 240–246 (2012).

AB21®

L. plantarum KABP™ 033

L. plantarum KABP™ 022

L. plantarum KABP™ 023

P. acidilactici KABP™ 021

2 billion CFU/dose



#### **Indications**

- → Viral respiratory infections
- → To boost adaptive immunity (antibody production)
- → Mild to moderate COVID-19 symptoms

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Vitamin D
- → Probiotic + Zinc







CAPSULES

**DROPS** 

#### **Clinical evidence**

- 1. Gutiérrez-Castrellón, P. et al. Probiotic improves symptomatic and viral clearance in Covid19 outpatients: a randomized, quadruple-blinded, placebo-controlled trial. Gut Microbes 14, (2022).
- **2.** Gutierrez-Castrellon, P., et al. Probiotic effect on SARS-CoV2 immunity is associated to type-1 interferons: A post-hoc analysis of a randomized, placebo-controlled trial. The FASEB Journal 36, (2022).

For more info visit:

ab21probiotic.com



# Cognitive health



## Cognitive health

## MINDBIOME®

L. plantarum DR7 1 billion CFU/dose

# MINDBIOME® **PLUS**

L. brevis KABP™ 052 L. plantarum KABP™ 023 1 billion CFU/dose

#### **Indications**

- → Stress and anxiety
- → Emotional wellbeing
- → Memory and cognition

- $\rightarrow$  To sleep and rest better

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Magnesium
- → Probiotic + Melatonin







**STICKS** 

#### **Indications**

- → Autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD)
- → Concentration and focus

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Vitamin D
- → Probiotic + Vitamin B







**STICKS** 

#### Clinical evidence

- 1. Chong HX, et al. Lactobacillus plantarum DR7 alleviates stress and anxiety in adults: A randomised, double-blind, placebo-controlled study. Benef. Microbes 10, 355-373 (2019)
- 2. Liu G, et al. Lactobacillus plantarum DR7 modulated bowel movement and gut microbiota associated with dopamine and serotonin pathways in stressed adults. Int. J. Mol. Sci. 21, 4608 (2020).
- 3. Lew LC, et al. Effects of potential probiotic strains on the fecal microbiota and Metabolites of d-Galactose-Induced Aging Rats Fed with High-Fat Diet. Probiotics Antimicrob. Proteins 12, 545-562 (2020).

#### Clinical evidence

- 1. Clinical trial on-going: Food intervention in children suffering from autism spectrum disorder (ASD) and or attention deficit hyperactivity disorder (ADHD): A randomized, double-blind, placebo-controlled study.
- 2. Clinical trial on-going: Randomized clinical trial to analyse the effect of a probiotic mixture on stress response and cognitive and emotional variables.
- 3. Pre-clinical trial in mouse model of induced cognitive deficit to test the probiotic effect on cognitive dysfunction. Manuscript under preparation.

# Our probiotic solutions Skin health



# AB-SAKEI 65®

L. sakei proBio 65 5 billion CFU/dose

#### **Indications**

- → Atopic dermatitis
- → Skin irritation, redness and discomfort
- → Promotes skin hydration and elasticity to prevent wrinkles

#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Zinc
- → Probiotic + Niacin + Vitamin C
- → Lysate (postbiotic)







SULES STICKS

CREAN

#### **Clinical evidence**

- 1. Woo SI, et al. Effect of *Lactobacillus sakei* supplementation in children with atopic eczema-dermatitis syndrome. Ann. Allergy, Asthma Immunol. 104, 343–348 (2010).
- 2. Park SB, et al. Effect of emollients containing vegetable-derived lactobacillus in the treatment of atopic dermatitis symptoms: Split-body clinical trial. Ann. Dermatol. 26, 150–155 (2014).
- **3.** Rather IA, et al. Oral administration of live and dead cells of *Lactobacillus sakei* proBio65 alleviated atopic dermatitis in children and adolescents: a randomized, double-blind, and placebo-controlled Study. Probiotics Antimicrob. Proteins (2020).
- **4.** Lim J, et al. Immune-modulating characteristics of *Lactobacillus sakei* proBio65 isolated from Kimchi. Korean J. Microbiol. Biotechnol. 39, 313–316 (2011).
- **5.** Kim JY, et al. Atopic dermatitis-mitigating effects of new *Lactobacillus* strain, *Lactobacillus* sakei probio 65 isolated from Kimchi. J. Appl. Microbiol. 115, 517–526 (2013).

# Our probiotic solutions Women's health



## AB-CYSCARE

L. plantarum KABP™ 062 L. plantarum KABP™ 063 1 billion CFU/dose



L. plantarum KABP™ 0610.1 billion CFU/dose

#### **Indications**

- → Urinary tract infections (UTIs)
- → Urogenital microbiota balance



#### **Finished formulas**

- → Probiotic alone
- → Probiotic + Cranberry extract + Vitamin C



#### **Indications**

- → Vaginal candidiasis
- → Vaginal microbiota balance

#### **Finished formulas**

- → Probiotic alone
- $\rightarrow$  Probiotic + Zinc + Biotin + Selenium
- → Heat-inactivated strain (postbiotic)





#### **Clinical evidence**

- 1. Simón E, et al. Screening of *Lactobacilli* strains of human origin candidates for the prevention of urinary tract infections. Ann. Nutr. Metab. 74, 1–31 (2019).
- 2. Clinical trial on-going: Clinical study to evaluate the efficacy of the food supplement AB-CYSCARE for the treatment of urinary tract infections due to reinfection.
- 3. Padayatty SJ, et al. Vitamin C as an antioxidant: evaluation of its role in disease prevention. J Am Coll Nutr. 22, 18-35 (2003)
- **4.** Wang CH, et al. Cranberry-containing products for prevention of urinary tract infections in susceptible populations: a systematic review and meta-analysis of randomized controlled trials. Arch Intern Med. 172, 988-96 (2012).
- **5.** Salo J, et al. Cranberry juice for the prevention of recurrences of urinary tract infections in children: a randomized controlled trial. Clin Infect Dis. 54, 340-6 (2012).

#### **Clinical evidence**

- 1. Palacios S, et al. Is it posible to prevent recurrent vulvovaginitis? Role of *Lactobacillus plantarum* 11001 (CECT7504). Eur J Clin Microbiol. Infect. Dis. 35, 1701–8 (2016).
- 2. Bonachera-Sierra MA, et al. Heat-inactivated *Lactiplantibacillus plantarum* KABP 061 exerts antipathogenic activity against causative agents of vulvovaginal candidiasis. Poster presented at IHMC Congress, Kobe, Japan (2022).
- **3.** Clinical trial on-going: Interventional study to evaluate the effect of the oral administration of *L. planta-rum* on vaginal microbiota.

# Eye health



# **AB-PROTEARS®**

L. sakei proBio 65
1 billion CFU/dose

#### **Indications**

- → Dry eye or ocular irritation
- → Allergies and inflammation of the eye surface

#### **Finished formulas**

→ Lysate (postbiotic) + Hypromellose



#### **Clinical evidence**

1. Iorio, R. et al. Lactobacillus sakei pro-bio65 reduces  $tnf-\alpha$  expression and upregulates gsh content and antioxidant enzymatic activities in human conjunctival cells. Transl Vis Sci Technol 10, (2021).

2. Heydari M. et al. The effect of ophthalmic and systemic formulations of Latilactobacillus sakei on clinical and immunological outcomes of patients with dry eye disease: a factorial, randomized, placebo-controlled, and triple-masking clinical trial. Manuscript submitted.

# Our available formats

## Our available formats

#### **CAPSULES**



- → 5 capsules
- → 15 capsules
- → 30 capsules
- → bulk

## MICROENCAPSULATED CAPSULES



- → 5 capsules
- → 15 capsules
- → 30 capsules
- → bulk

Probiotics microencapsulated with PROBS® technology, to ensure stability when mixed with specific ingredients like Omega 3 oil or Cranberry extract

#### STICKS



- → 2 sticks
- → 20 sticks
- $\rightarrow$  30 sticks
- $\rightarrow$  42 sticks
- $\rightarrow$  90 sticks
- $\rightarrow$  bulk

#### SHOTS



- → 5 shots
- →7 shots
- $\rightarrow$  10 shots
- → bulk

## BLUE OR INLINE DROPPER



- → 3ml shots
- →8ml shots
- → 10ml shots
- $\rightarrow$  bulk

## Our available formats

# YOUR BRAND HERE → 3ml dropper → 8ml dropper

# ORAL GUMS SSRI 1778199 → 8 tablets

# **ORAL TABLETS** $\rightarrow$ 5 tablets $\rightarrow$ 10 tablets $\rightarrow$ 15 tablets → 30 tablets → 60 tablets $\rightarrow$ bulk





# **Quality standards**



Patented products



Clinically-proven and safe



Organic strains, natural origin



Allergen-free



Qualified Presumption of Safety status (EFSA)



Not modified genetically



Generally Recognised as Safe (FDA) and/or Natural Product Number (Health Canada) Our global footprint gives us a unique view of the ever changing probiotic landscape enabling us to offer regulatory support in not only supplements, and functional foods but also OTC and medical applications to meet the needs of consumers worldwide.

