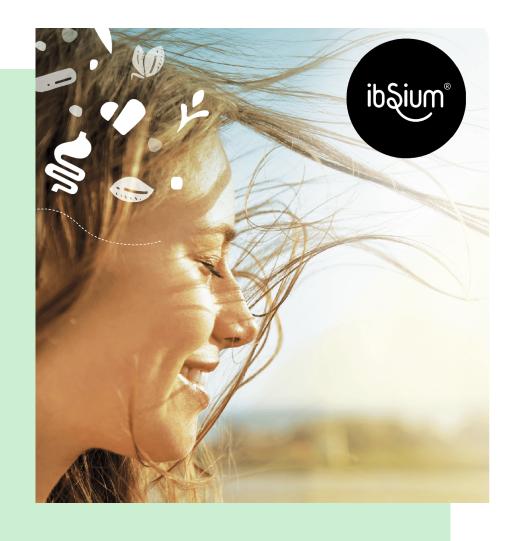




portfolio.

clinically supported ingredients



INDICATIONS

GUT HEALTH
IRRITABLE BOWEL SYNDROME (IBS)



probiotic yeast for complete intestinal support, including irritable bowel syndrome (IBS), produced from a patented strain of Saccharomyces cerevisiae CNCM I-3856

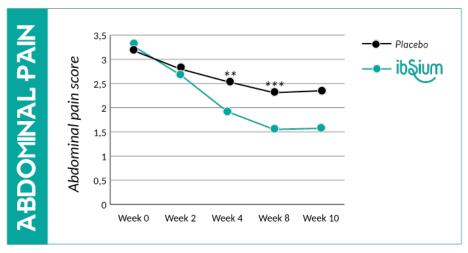
- supplierGnosis by Lesaffre
- product grade
 powder suitable for tablets and capsules
- daily dose500 mg
- stability24 months shelf life
- certificates
 Halal, Kosher, non-GMO, Vegan, Lactose-free,
 Gluten-free

- proprietary and patented strain
- safe and fast-acting
- clinically proven to relieve abdominal pain, bloating and constipation
- beneficial in irritable bowel syndrome (IBS)

mechanisms of action:

- analgesic
 alleviates abdominal pain and discomfort
- anti-inflammatory
 modulates the intestinal inflammation
- co-aggregation with intestinal pathogens limits the overgrowth of bacteria

EVOLUTION OF ABDOMINAL PAIN SCORE IN GENERAL IBS POPULATION

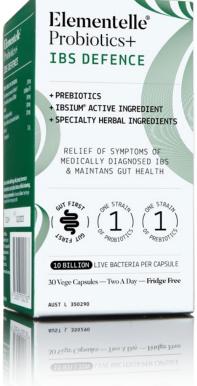


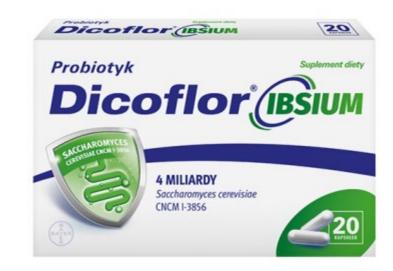
Statistically significant intergroup differences symbolized by **(p<0.01) and ***(p<0.001)

Clinical studies:

- Spiller et al., 2015. Randomized double blind placebo-controlled trial of Saccharomyces cerevisiae
 CNCM I-3856 in irritable bowel syndrome: improvement in abdominal pain and bloating in those with predominant constipation
- Chambrun et al., 2015: A randomized clinical trial of Saccharomyces cerevisiae versus placebo in the irritable bowel syndrome
- Meta-analysis by Cayzeele-Decherf et al., 2017: Saccharomyces cerevisiae CNCM I-3856 in irritable bowel syndrome: An individual subject meta-analysis
- Gayathri et al., 2019: Efficacy of Saccharomyces cerevisiae CNCM I-3856 as an add-on therapy for irritable bowel syndrome
- Consumer study: significant improvement of gut discomfort, majority experienced effects within the first 15 days of consumption













LifeinU™ *Bacillus subtilis* CU1 is a highly stable patented strain for probiotic immune system support

- supplierGnosis by Lesaffre
- product grade
 fine powder suitable for several matrices as functional foods or food supplements
- daily dose20 mg/day (2x10^9 CFU/day)
- stability24 months at 40°C 75%RH
- certificates
 Halal, Kosher, non-GMO, lactose & gluten-free



INDICATIONS
IMMUNE SUPPORT
GUT HEALTH



- safe and natural solution to protect from common respiratory and gastrointestinal infections
- highly stable probiotic
- can be used alone or in combination with other ingredients in dietary supplements

mechanisms of action:

- supports mucosal immune responses by increasing immunoglobulin slgA levels in the intestine and saliva
- slgA are the most abundant antibodies of the immune system and represent the first line defense against pathogens
- LifeinU™ BSCU1 showed 45% reduction in the frequency of upper respiratory tract infections



clinical studies:

- Lefevre et al., 2015: Probiotic strain Bacillus subtilis CU1 stimulates immune system of elderly during common infectious disease period: a randomized, double-blind placebo-controlled study
- Lefevre et al., 2017: Safety assessment of Bacillus subtilis CU1 for use as a probiotic in humans

pre-clinical study:

 Urdaci et al., 2018: Antidiarrheal action of Bacillus subtilis CU1 CNCM I-2745 and Lactobacillus plantarum CNCM I-4547 in mice

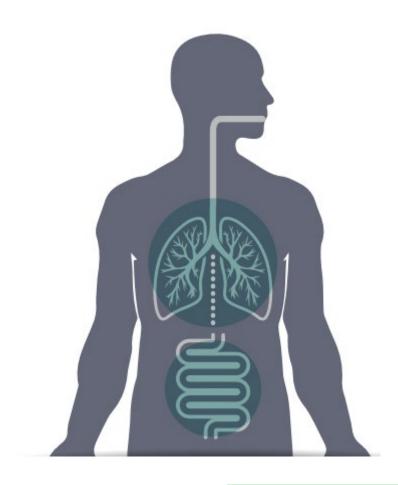




Lifeinu

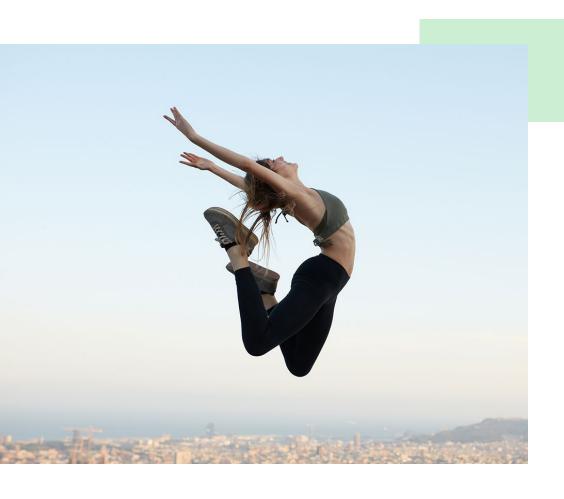
LifeinU™ L. rhamnosus GG 100 is the best-known probiotic strain of Lactobacillus rhamnosus GG with proven beneficial effects on digestive health

- supplierGnosis by Lesaffree
- product grade fine powder
- daily dose10-200 mg (1x10^9 2x10^10 CFU/day)
- stability24 months
- certificates
 Kosher, non-GMO, lactose & gluten free



INDICATIONS

GUT HEALTH
DIARRHEA MANAGEMENT
IMMUNE SUPPORT



- Lactobacillus rhamnosus GG is the most studied probiotic strain worldwide
- proven beneficial effects on digestive and immune health
- safe for the whole family including infants
- 100% French production

mechanisms of action:

- helps restore and maintain a balanced gastrointestinal flora, protecting the gut from antibiotic-associated diarrhea, and preventing acute diarrhea
- boosts the body's natural defenses helping to reduce the occurrence of common colds
- speeds up recovery time from common cold



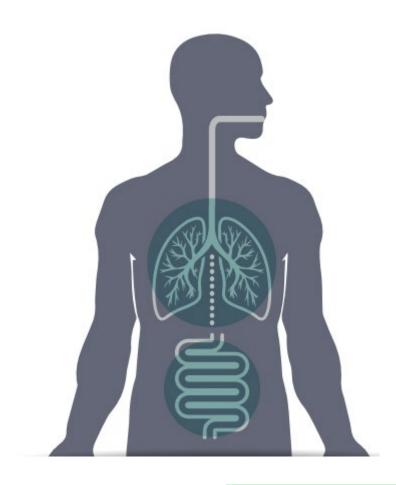






the most documented probiotic yeast *Saccharomyces* cerevisiae var. boulardii, a proprietary strain of Lesaffre, with gut health benefits and diarrhea management

- supplierGnosis by Lesaffre
- product grade
 powder which can be used alone or with
 other ingredients (in capsules or individual
 sachets as dietary supplements or drug)
- daily dose250 mg (5x10^9 CFU/day)
- certificates
 Halal, Kosher, non-GMO, lactose & gluten
 free, suitable for Vegan diet



INDICATIONS

GUT HEALTH
DIARRHEA MANAGEMENT
IMMUNE SUPPORT



- probiotic yeast with strong scientific background, well-known and recommended by doctors
- no antibiotic susceptibility, resistant to GI conditions, grows at body temperature, non-colonizing
- clinically proven to reduce diarrhea, promote normal bowel function in adults and children and to help restore a balanced gut microbiota
- most stable S. boulardii on the market

mechanisms of action:

- restoring balanced gut microbiota
- pathogen binding and eliminating capacity, neutralization of virulence factors
- **immunomodulatory action,** stimulation of release of slgA as the first-line defense against pathogens
- protection of tight junctions for improved gut barrier function
- **prebiotic effect** by yeast cell wall components







natural powder from 100% New Zealand-grown green kiwifruit (*Actinidia chinensis var. delicosa*) for bowel regularity support

- supplierAnagenix
- product grade
 powder suitable for capsules, tablets, powder
 forms, sachets, bulk powder blends, gummies
- daily dose600 mg
- stability30 months shelf life
- certificates
 non-GMO project verified, Kosher



INDICATIONS GUT HEALTH BOWEL IRREGULARITY DIGESTIVE DISCOMFORT

- clinically assessed digestive health ingredient
- FODMAP-friendly
- multiple format applications
- small dosage
- proprietary processing retains high levels of key nutrients and bioactives
- rich in soluble and insoluble fibers, as well as enzyme actinidin
- preservative-, sugar-, and gluten-free
- clinically supported combination with Livaux®

mechanisms of action:

- high fiber content, promotes regularity, increases the rate of gastric emptying
- reduces bloating, gastric discomfort and constipation
- contains enzyme actinidin to help with protein digestion
- prebiotic activity, supports production of short chain fatty acids (SCFA)



clinical study:

- Ansell et al., 2015: Kiwifruit-derived supplements increase stool frequency in healthy adults: a randomized, double-blind, placebo-controlled study
 - While the number of stools increased, their form was not affected – Actazin® did not induce loose stools

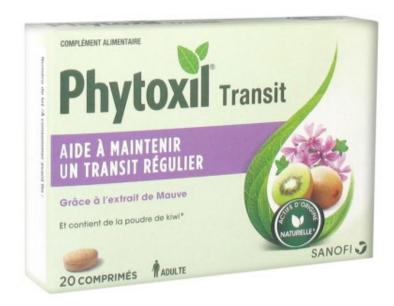
pre-clinical studies:

- Duysburgh et al., 2019: A synbiotic concept containing spore-forming Bacillus strains and a prebiotic fiber blend consistently enhanced metabolic activity by modulation of the gut microbiome in vitro
 - Fructooligosaccharides (FOS) from kiwifruit in combination with other prebiotics influenced microbial activity and composition in vitro, and enhanced butyrate production

- internal in vitro study: Prebiotic effects of Actazin in vitro – microbial growth
 - Actazin® supported the growth of probiotic strains, but not pathogenic bacteria









patented, award-winning, natural powder from 100% New Zealand-grown gold kiwifruit (*Actinidia chinensis* var. *chinensis*) with prebiotic properties supporting gut microbiome balance

- supplierAnagenix
- product grade
 powder suitable for capsules, tablets, powders, sachets, bulk powder blends, gummies
- daily dose 600 mg
- stability30 months shelf life
- certificates
 non-GMO Project verified, Kosher, Halal, Vegan

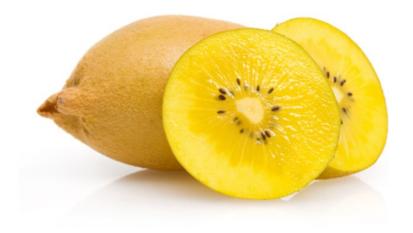


INDICATIONS

GUT HEALTH
PREBIOTIC SUPPORT
MICROBIOME BALANCE
IMMUNE SUPPORT

mechanisms of action:

- targeted prebiotic action
- balances microbiome by restoring intestinal bacterium called Faecalibacterium prausnitzii (F.prau) with numerous benefits for human health.
- rich in polyphenols and vitamins
- supports mucosal immunity in vitro



advantages:

- clinically tested ingredient for digestive health
- FODMAP-friendly
- multiple format applications
- small dosage
- proprietary processing retains high levels of key nutrients and bioactives
- contains polyphenols, vitamins C, E and folate, some fibers
- free from preservatives or added sugars, glutenfree
- patented
- clinically supported combination with Actazin®

clinical studies:

- Ansell et al., 2015: Kiwifruit-derived supplements increase stool frequency in healthy adults: a randomized, double-blind, placebo-controlled study
 - significant increase in mean daily bowel movements, stool form was not affected
- Blatchford et al., 2017: Consumption of kiwifruit capsules increases Faecalibacterium prausnitzii abundance in functionally constipated individuals: a randomised controlled human trial
 - F.prau is a beneficial microorganism that accounts for >5 % of the total colonic microbiome and produces butyrate, which is the energy source for intestinal epithelial cells and has anti-inflammatory, immune-balancing and gut barrier-improving effects within the intestine

pre-clinical studies:

- Duysburgh et al., 2019: A synbiotic concept containing spore-forming Bacillus strains and a prebiotic fiber blend consistently enhanced metabolic activity by modulation of the gut microbiome in vitro
 - Fructooligosaccharides (FOS) from kiwifruit in combination with other prebiotics influenced microbial activity and composition in vitro, and enhanced butyrate production
- internal study: Effect of Livaux on mucosal immune health efficacy in vitro
 - Livaux® activated γδ-T cells and increased levels of antimicrobial peptide β-defensin 2
- internal study: Probiotic activity of Livaux in vitro
 - Supports growth of probiotic strains (bifidobacteria and lactobacillus) and butyrate production









INDICATIONS

IMMUNE SUPPORT
GUT HEALTH
ANTI-INFLAMMATORY SUPPORT



a postbiotic for immune and gut support, from a unique fermentation process using Saccharomyces cerevisiae (baker's yeast), rich in nutrients and metabolites.

- supplierCargill
- product grade powder
- daily dose500 mg
- stability36 months shelf life
- certificates
 Kosher, Halal, Non-GMO Project verified, Allergen-free, Gluten-free, Vegan

- highly clinically supported
 7 clinical studies and multiple pre-clinical studies
- strengthens and balances the immune system via multiple mechanisms
- significantly reduces the incidence and duration of symptoms of upper respiratory tract infections (URTI), namely cold and flu
- significantly reduces allergy symptoms
- acts like "a vitamin for your immune system", when taken daily
- fast action works within 2 hours after intake

mechanisms of action:

- stimulates the release of secretory immunoglobulin A in mucosal tissues to protect against pathogens
- activates natural killer (NK) cells
 which recognize and destroy infected cells, within 2 hours after ingestion
- increases serum antioxidant capacity
- anti-inflammatory action
- prebiotic action

 increases beneficial gut bacteria and improves
 gastrointestinal discomfort

clinical studies:

- Moyad et al., 2008: Effects of a modified yeast supplement on cold/flu symptoms
- Jensen et al., 2008: A double-blind placebo-controlled, randomized pilot study: consumption of a high-metabolite immunogen from yeast culture has beneficial effects on erythrocyte health and mucosal immune protection in healthy subjects
- Moyad et al., 2009: Immunogenic yeast-based fermentation product reduces allergic rhinitis-induced nasal congestion: a randomized, double-blind, placebo-controlled trial
- Moyad et al., 2010: Immunogenic yeast-based fermentate for cold/flu-like symptoms in nonvaccinated individuals
- Jensen et al., 2011: Antioxidant bioavailability and rapid immune-modulating effects after consumption of a single acute dose of a high-metabolite yeast immunogen: results of a placebo-controlled double-blinded crossover pilot study fast action
- Jensen et al., 2014: Anti-inflammatory properties of a dried fermentate in vitro and in vivo
- Pinheiro et al., 2017: A yeast fermentate improves gastrointestinal discomfort and constipation by modulation of the gut microbiome: results from a randomized double-blind placebo-controlled pilot trial
- + 8 pre-clinical studies









hermes consilium

Hermes Consilium Ltd.