



## portfolio.

clinically supported ingredients

	Gingever <sup>™</sup>	Proferrin	<u>GutGuard®</u>	<u>Actazin®</u>	<u>Livaux®</u>	<u>lbsium®</u>	LifeinU™ BSCU1	LifeinU™ LGG 100	Lynside® PRO SCB	Lynside® Forte
Anti-inflammatory	•	•								
Anti-oxidative		•								•
Liver health										
Blood glucose										•
Bone health										
Cognition/brain health										٠
Eye health										•
Fertility										•
Gut health	•	•	٠	•	•	•	٠	•	٠	
Cardiovascular health										
Immune support	٠	٠			•		٠	•	٠	•
Joint health	•									
Healthy ageing										•
Energy										•
Prenatal health										
Skin health & beauty										•
Sleep support										
Sports nutrition										
Stress/mood support										•
Urinary/vaginal health										٠
Weight management										



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

• **supplier** Gnosis by Lesaffre

- product grade
  powder suitable for tablets and capsules
- daily dose 500 mg
- stability
  24 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:

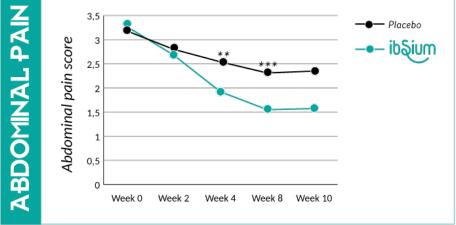
 analgesic alleviates abdominal pain and discomfort

## 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<sup>™</sup> Bacillus subtilis CU1 is a highly stable patented strain for probiotic immune system support

## • **supplier** Gnosis by Lesaffre

## product grade

fine powder suitable for several matrices as functional foods or food supplements

- daily dose
  20 mg/day (2x10^9 CFU/day)
- stability

24 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<sup>™</sup> 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





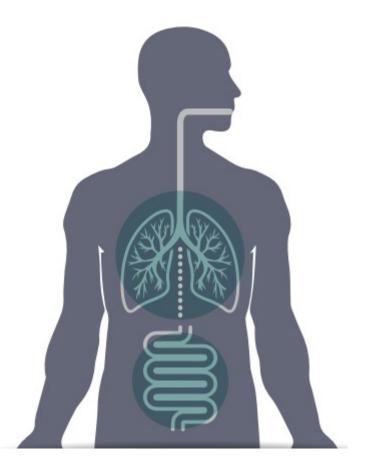
## Lifein

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

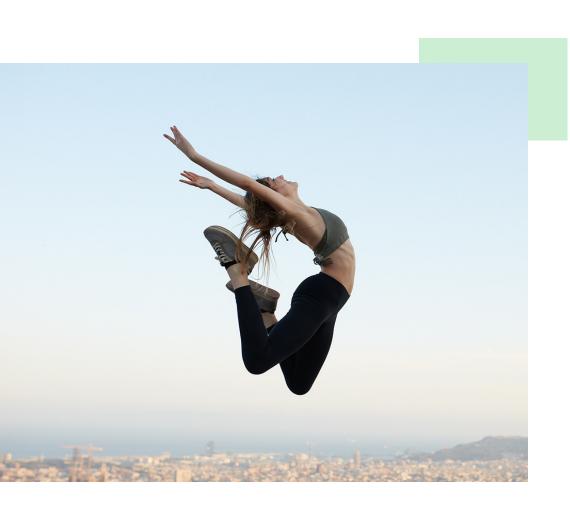
## • **supplier** Gnosis by Lesaffree

- **product grade** fine powder
- daily dose
  10-200 mg (1x10^9 2x10^10 CFU/day)
- **stability** 24 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

supplier

Gnosis by Lesaffre

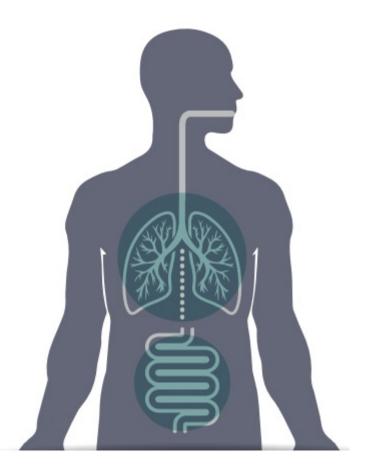
 product grade powder which can be used alone or with other ingredients (in capsules or individual sachets as dietary supplements or drug)

## daily dose

250 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 Gl 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



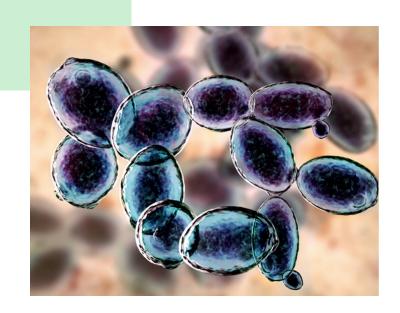


## Lynside<sup>®</sup> Forte

a range of inactive dried yeast (*Saccharomyces cerevisiae*), enriched with vitamins (B complex) or minerals like selenium, zinc, chromium

## Lynside® Forte Se+ 2000

- organically bound selenium (Se) Se is incorporated during fermentation process directly into the yeast to be transformed into its organic form: selenomethionine
- 2-times higher bioavailability than inorganic selenium
- provides 2,000-2,400 μg/g selenium
- indications: beauty, immunity, thyroid support, anti-aging, fertility, women's health





## Lynside® Forte Zn

- nutritional yeast fortified with zinc (Zn)
- high bioavailability compared to other common zinc sources
- in addition to zinc, this fortified yeast also provides vitamins, proteins, minerals, fibers, ß-glucans, and more nutrients that contribute to overall wellness
- provides 100,000-120,000 μg/g zinc
- indications: immunity, beauty, fertility, eye health, antioxidative support

## Lynside® Forte Cr 2000

- fortified yeast with bioavailable chromium (Cr)
- the product provides nutritional yeast content (high quality proteins, vitamins and minerals, dietary fibres) and 2,000-2,400 µg/g chromium
- indications: blood sugar management, metabolic support

## **%GutGard**®

natural bioactive derived from *Glycyrrhiza glabra* (licorice), clinically studied for alleviating symptoms of daily gut health issues - upper abdominal fullness, upper abdominal pain, nausea, bloating, belching & regurgitation

supplier
 Natural Remedies

## product grade

powder suitable for chewables, gummies, beverages and powders

- daily dose
  150 mg per day
- stability
  24 months shelf life

## certificates

non-GMO Project verified, Kosher, Halal



INDICATIONS GUT HEALTH FUNCTIONAL DYSPEPSIA H. PYLORI MANAGEMENT

- **supported by clinical** and preclinical studies
- works in stomach and intestine
- clinically tested for alleviating symptoms of occasional indigestion & heartburn and management of *Helicobacter pylori*
- **soft extraction process** to retain flavonoid content
- **neutral taste,** low dose offers formulation flexibility
- low water activity, can be combined with probiotics or digestive enzymes
- differs from regular deglycyrrhizinated licorice (DGL)
- < 0.5% glycyrrhizin ensures safety

## mechanisms of action:

- prokinetic action supports gastric emptying and gastrointestinal motility
- antioxidant and anti-ulcer activity protects gastric mucosa
- **reduces** inflammation
- **decreases** gastric acidity
- reduces *H. pylori* levels in the stomach
- **synergistic activity** with probiotics



## clinical studies:

- Puram et al., 2013: Effect of GutGard in the management of Helicobacter pylori: a randomized double blind placebo controlled study
- Raveendra et al., 2012: An extract of Glycyrrhiza glabra (GutGard) alleviates symptoms of functional dyspepsia: a randomized, double-blind, placebocontrolled study

## pre-clinical studies:

- Mukherjee et al., 2010: Anti-ulcer and antioxidant activity of GutGard<sup>™</sup>
- Murugan et al., 2017: Effect of flavonoid rich root extract of *Glycyrrhiza glabra* on gastric emptying and gastrointestinal transit in albino Wistar Rats (alleviates symptoms of functional dyspepsia via prokinetic activity – promotes gastric emptying and Gl transit)



#### Article

Evaluation of the mutagenic potential and acute oral toxicity of standardized extract of Ocimum sanctum (OciBest<sup>TM</sup>)

C.V. Chandrasekaran, H.S. Srikanth, M.S. Anand, J. Joshua Allan, M. M. Hipolith Viji and A. Amit

#### Abstract

1

Ocimum sonctum L. (Lamiaceae) is found throughout India and in many parts of world. O. sonctum is used for the treatment of various health indications. In this lieu, it is of prime importance to investigate the safety aspects of the plant. Hence, the present study was conducted to investigate the possible genotoxic potential and acute oral toxicity of the extract of 0. sonctum (OciBest<sup>TM</sup>). The standard battery of in vitro genotoxicity tests, namely bacterial reverse mutation, chromosome aberration and micronucleus (MN) tests were employed to assess the possible mutagenic activity. The results showed that OciBest™ (7.9-2500.0 µg/mL) did not increase the number of histidine revertant colonies in Salmonella typhimunium strains (TA98 and TAMix) with and without exogenous metabolic activation (S9), OciBest<sup>TM</sup> (10.0-100.0 µg/mL) did not show structural chromosomal aberrations or increase in MN induction, with and without S9, at the tested dose range in both 4-h and 18-h exposure cell cultures. Thus, OciBest™ is not genotoxic in bacterial reverse mutation, chromosomal aberration and MN tests. In an acute oral toxicity test, rats were treated with 5 g/kg of OciBest™ and observed for signs of toxicity for 14 days and the results did not show any treatment-related toxic effects to Wistar rats.

#### Keywords

Ocimum sonctum; OciBest<sup>TM</sup>; bacterial reverse mutation test; chromosomal aberrations; micronudeus; acute oral toxicity

#### Introduction

The use of natural products as medicinal agents presumably predates the earliest recorded history. Ocimum is a genus of about 35 species of aromatic annual and perennial herbs and shrubs in the family Lamiaceae. One among them is Ocimum sanctum (synonym - Ocimum tenuiflorum), commonly called as Holy Basil or Tulsi, is a small herb found throughout India from Andaman and Nicobar islands to the Himalayas up to 1800 m above the sea level.1 It is renowned for its religious and spiritual sanctity as well as for its important role in the traditional ayur- R&D centre, Natural Remedies Pet Ltd, Bangalore, Kamataka, veda and unani systems of holistic health and herbal india medicine of the East,2 Different parts of O. sanctum (leaves, flowers, stem, root and seeds) are known to possess therapeutic potentials<sup>3</sup> and have been used Remedies Pvt Ltd, Plot No. SB, Veeraandra Indl. Area, 19th in indigenous ayurveda medicine<sup>4</sup> to cure wide array K.M. Stone, Hosur Road, Bangalore 560100, Kamataka, India. of diseases since time immemorial. One among the Email: cvc@naturalremedy.com

popular, well-supported traditional remedy for alleviating stress symptoms is O. sanctum. Charaka samhita, an ayurvedic text, mentioned that O. sanctum is considered to be an adaptogen, balancing different processes in the body and helpful for adapting to stress. O. sanctum is known to possess anticarcinogenic, antistress,7 wound healing,8 antioxidant,9 anti-inflammatory,10 antibacterial,11 antidiabetic,12 neuroprotective,13 antifertility14 and radioprotective15 properties.

HET

Reprints and permission DOI: 10.1177/0940327112472992

had appendix one

**C**SAGE

Harran and Experimental Toxicology 32(9) 992-1004 (D The Author(s) 2013

#### Corresponding author

Chirampudur Velusami Chandrasekaran, R&D centre, Natural







branded, high potency extract of ginger for digestion and immunity support

### • **supplier** OmniActive

## product grade

powder or paste most suitable for capsules, softgels, etc. (very strong taste)

## daily dose

20-250 mg (depends on the product grade and indication)

## stability

24 months shelf life

## certificates

Vegetarian, Vegan, Kosher, Halal



INDICATIONS ANTI-INFLAMMATORY SUPPORT GUT HEALTH, DIGESTION IMMUNE SUPPORT JOINT HEALTH



- high potency ginger extract in a small dose clinically relevant dose of key bioactives in one small pill compared to 1,000 mg of ginger root powder
- solvent free extraction
- **UltraSOL<sup>™</sup> platform** provides application versatility
- batch-to-batch consistency

## mechanisms of action:

- foundational immune support neutralizes free radicals, modulates inflammation, and limits microbial growth
- antioxidant and anti-inflammatory action
- ginger helps soothe upset stomach, motion sickness and nausea
- supports proper gastrointestinal function









milk-derived protein, recognized for its role in immunity, digestive health and iron metabolism, suitable for all age groups

#### supplier Ingredia Nutritional

#### product grade

powder perfectly adapted to both dietary supplements (tablets, capsules, softgels, gummies) and functional foods (bars, dairies, beverages)

### daily dose

250-1000 mg

#### stability 24 months of shelf life

certificates

Halal



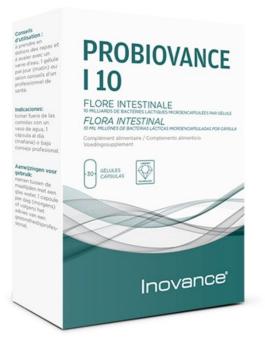
**INDICATIONS IMMUNE SUPPORT** GUT HEALTH ANTI-INFLAMMATORY SUPPORT ANTI-OXIDATIVE SUPPORT

- natural ingredient, found also in human secretions like saliva, tears and breast milk
- suitable for the most sensitive target groups such as infants with few other available options for immune and gut support
- the highest purity on the market (>95%)
- **native lactoferrin** as found in fresh cow's milk
- gentle processing to preserve structure and biological activity
- **high bioactivity,** with iron binding ability
- scientifically supported

## mechanisms of action:

- in vitro immuno-stimulatory effect stimulates lymphocytes (immune cells) proliferation to improve adaptive immune response
- in vitro anti-inflammatory effect significantly reduces the release of a proinflammatory marker TNFalpha
- in vitro action against viral infection inhibition of virus entry into the cell and replication
- **high bioactivity,** with iron binding ability
- **reduces** pathogenic bacterial colonies









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

## supplier

Anagenix

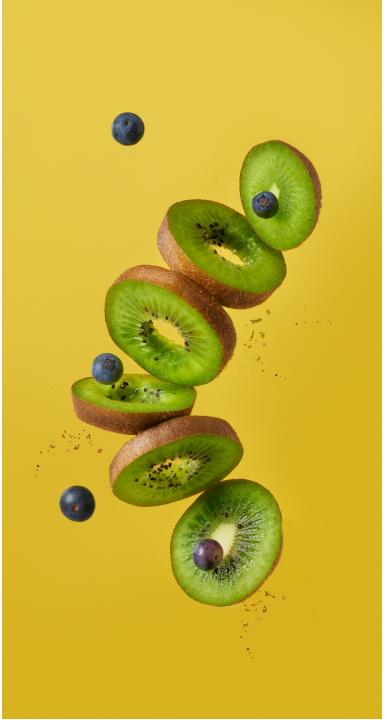
## product grade

powder suitable for capsules, tablets, powder forms, sachets, bulk powder blends, gummies

## daily dose 600 mg

stability
 30 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:

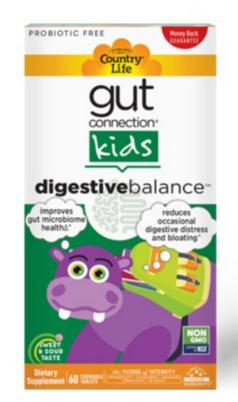
- Ansell et al., 2015: Kiwifruit-derived supplements increase stool frequency in healthy adults: a randomized, double-blind, placebo-controlled study
  - While the number of stools increased, their form was not affected – Actazin® did not induce loose stools

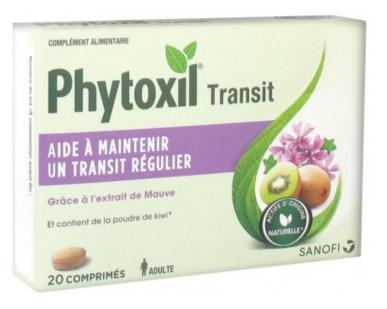
## pre-clinical studies:

- 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

• **supplier** Anagenix

## product grade

powder suitable for capsules, tablets, powders, sachets, bulk powder blends, gummies

- daily dose
  600 mg
- stability
  30 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, gluten-free
- 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







# hermes consilium

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