



 **Laboratoria  
Natury**



**LLP<sup>®</sup> ProBites  
& VitaBites**



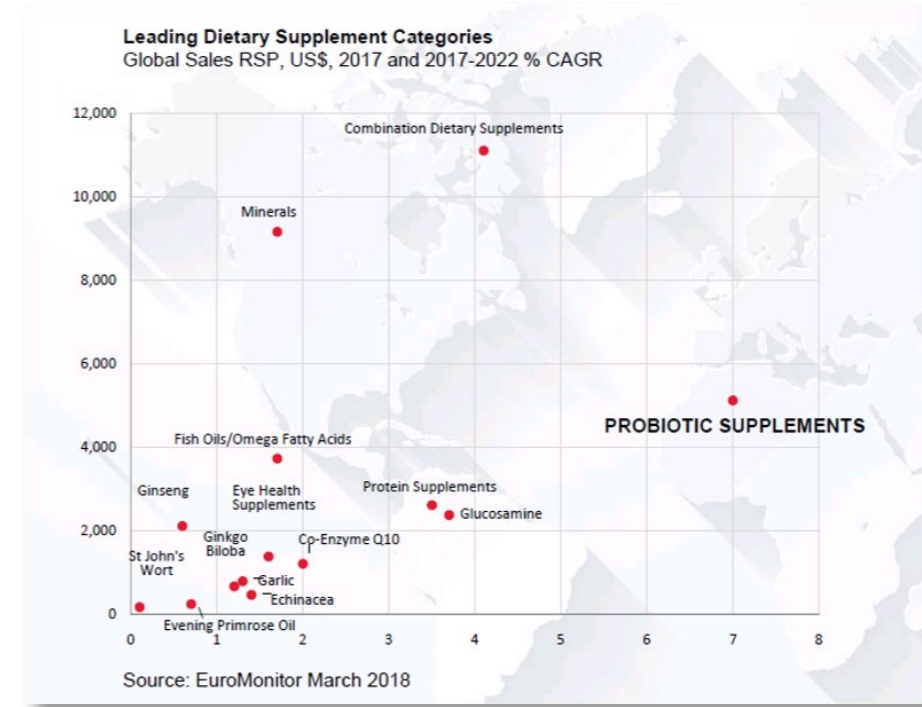
## Probiotics introduction and challenges

- Probiotics are live “good” bacteria
- As such are susceptible to high temperature and humidity
- Effective dosages are in the range of 1-50 billion per serving size depending on strain and targeted conditions
- There is a wide range of probiotic strains, each with a specific effect on the host
- Research is focusing in two major files:
  - Branded strains backed with clinical trials
  - Innovative stable dosage form of final products



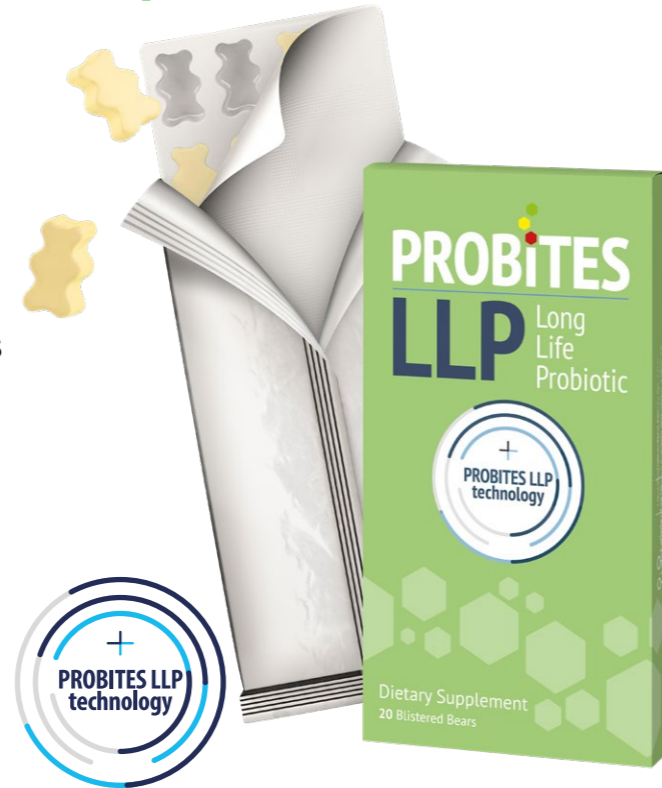
**Stability** and **long life of probiotic** are the two key challenges to developing an effective probiotic supplement due to the probiotic sensitivity, especially in an edible dosage format. The probiotics are sensitive materials and as a live cell they need special condition to survive.

## Probiotic supplements - #1 in growth



## Your new dosage form for probiotic products:

- Friendly dosage form - BITES
- High Stability of live bacteria
- Variety of health condition
- Survival & colonization



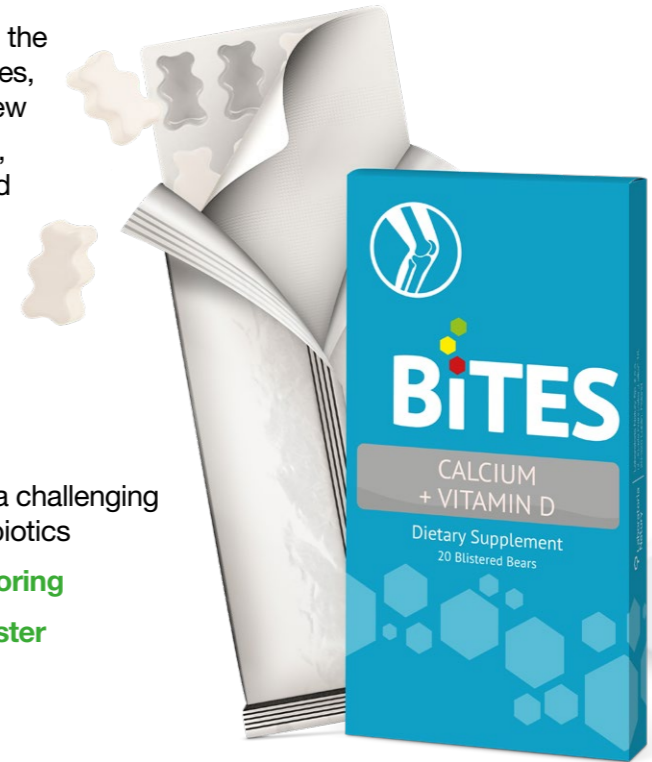
## BITES- friendly dosage form

- **GREAT TASTE:** with taste being the top factor influencing kids' choices, bites are delicious and fun to chew
- **VISUALLY APPEALING:** cheery, playful shapes, natural colors and brightly - colored packaging
- **ENTICING TEXTURE:** squishy, smooth, soft texture and small, friendly size

An **effective delivery platform** for a challenging range of active ingredients like Probiotics

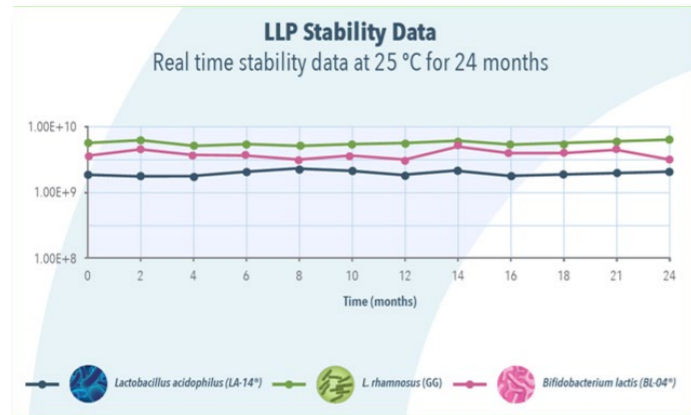
**No preservatives, no artificial coloring**

Packed **individually** in a **sealed blister**



## High Stability of live bacteria

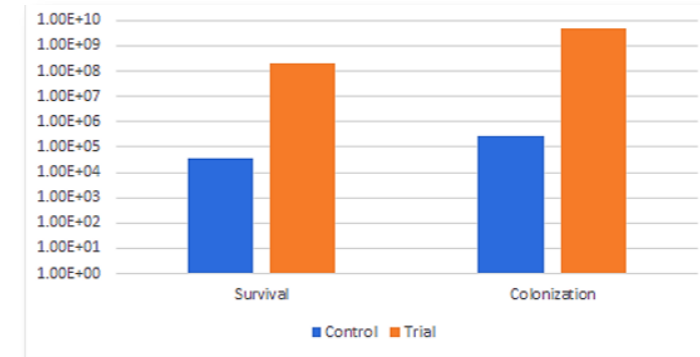
- **LLP<sup>®</sup>** is a novel technology that ensures long life probiotic in an edible chewy (Chocolate like chewable matrix) supplement
- **LLP<sup>®</sup>** performs high stability performance in room temperature up to 24 months
- **LLP<sup>®</sup>** products can be produced with a single bacteria strain or combination of strains



## Study: Survival and Colonization of probiotic strains in LLP<sup>®</sup> BITES

Proving survival of probiotics through GI track: LLP<sup>®</sup> has properties to protect the probiotic active bacteria in the harsh conditions of the stomach

Proving colonization in the gut: LLP<sup>®</sup> do not pose as a barrier from colonization, and the bacteria is growing and thriving in the large intestine



## Variety of health condition



# LLP<sup>®</sup> ProBites ready solutions

## LLP<sup>®</sup> Immune For immune system

**Active ingredient** - 2 billion (2x10<sup>9</sup> CFU):

- Bifidobacterium lactis BI 04<sup>®</sup>
- Lactobacillus Acidophilus La 14<sup>®</sup>

Natural fibers from native chicory inulin

**Optional with:** Zinc, Vitamin C, Vitamin D

### Benefits:

- Promotes a healthy immune response
- Helps maintain healthy respiratory function
- #1 Dr. Preferred Probiotic (BI-04<sup>®</sup>) for Respiratory Health

(2018 ProVoiceSurvey of 250 Board Certified Primary Care Physicians)



## LLP<sup>®</sup> Immune Study

“Probiotic supplementation for respiratory and gastrointestinal illness symptoms in healthy physically active individuals”

Subjects taking Bifidobacterium lactis BI-04 had 27% less risk of experiencing URTI episodes (p=0.02)

### Key findings for BI-04<sup>®</sup> :

- Delays onset of respiratory tract illness versus placebo
- Supports the immune system in your nasal passages
- Helps maintain respiratory health in healthy active adults
- Helps to keep you healthy, longer

### Description:

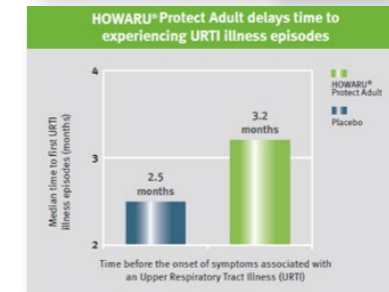
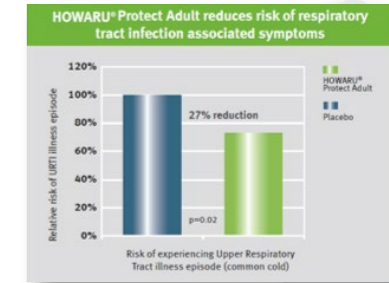
LLP<sup>®</sup> immune probiotic is a combination of 2 back upped strains (Howareu<sup>®</sup>) containing active inulin fibers. LLP Basic can be used on a daily bases for kids and adults. LLP basic can help to restore the proper balance of the gastrointestinal flora and support the immune system and the upper respiratory tract.

The product can be used during and after antibiotic therapy to supplement the intestinal microbiota (intestinal bacterial flora). It can also be used when traveling with a change in the climate zone, when the composition of the microflora changes in the digestive tract.

An increasing number of research studies also show the benefits of probiotics in addressing respiratory and common cold conditions. Probiotics are safe and effective in reducing common cold-associated symptoms, such as- fever, rhinorrhea, and cough incidences. Prebiotic fibers help probiotics grow and balance the bacteria in the gut. This is why probiotics are widely used to prevent diarrhea and support normal bowel function, especially during and after antibiotic treatment.

### Reference:

West et al., 2014. Probiotic supplementation for respiratory and gastrointestinal illness symptoms in healthy physically active individuals. Clin Nutr. 2014 Aug;33(4):58 1-7.



## LLP<sup>®</sup> Gastro

For good digestive health

**Active ingredient** - 10 billion (10x10<sup>9</sup> CFU):

- Lactobacillus acidophilus NCFM<sup>®</sup>
- Lactobacillus paracasei Lpc-37<sup>™</sup>
- Bifidobacterium lactis Bi-07<sup>™</sup>
- Bifidobacterium lactis Bi-04<sup>®</sup>

### Benefits:

- Help maintain good digestive health during episodes of gut stress
- Lower the risk of AAD, CDAD, and gastrointestinal symptoms in a dose-dependent manner in adult in-patients
- Help minimize gastrointestinal symptoms associated with antibiotic use



## LLP<sup>®</sup> Gastro Restore – study

“Probiotics reduce symptoms of antibiotic use in a hospital setting: a randomized dose response study”

### Key findings for Restore II:

- Number of episodes of AAD
- Duration of diarrhea and number of liquid stools
- Diarrhea-associated symptoms such as fever, bloating and abdominal pain

### Description:

Of all the organs in the human body, those of the gut are most susceptible to external stress factors that can throw your beneficial bacteria off balance and undermine the body’s natural frontline of defense. Antibiotic treatment, travel, a poor diet and a hectic way of life are just some of the stresses your GI tract may encounter on a daily basis.

The HOWARU<sup>®</sup> Restore formulation is designed to provide 50% by count of those bacteria that are adapted to the upper intestine—specifically the Lactobacillus species: L. acidophilus NCFM<sup>®</sup> and L. paracasei Lpc-37<sup>™</sup>. The remaining 50% by count is provided by Bifidobacterium species, which are adapted to the lower intestinal tract. These strains are B. lactis Bi-07<sup>™</sup> and B. lactis Bi-04<sup>™</sup>.

### Reference:

Vaccine. 2014 Jan 16;32(4):458-63. doi: 10.1016/j.vaccine.2013.11.053. Epub 2013 Nov 26.

## LLP® Femina For Vaginal Health

**Active ingredient** - 6 billion (6x10<sup>9</sup> CFU):

- Lactobacillus acidophilus La-14
- Bifidobacterium animalis subsp. lactis Bi-07
- Bifidobacterium bifidum Bb-06
- Lactobacillus rhamnosus Lr-32
- Bifidobacterium lactis BI-04

Natural fibers from native chicory inulin

**Optional with:** Cranberry extract

### Benefits:

- LLP® Vaginal Health is a strengthened combination of 5 probiotic strains indicated mainly for women's health Promotes healthy vaginal microbiota
- Helps maintain healthy vaginal PH
- Conditions as recurrent Bacterial vaginosis and candida



## LLP® Femina-Vaginal Health

### Description:

BV and VC are the most prevalent vaginal infections, and many women experience them more than once in their lifetimes. Although these vaginal infections are generally treated with antibiotics, repeated exposure to antibiotics is associated with a high probability of complications, recurrence, and antibiotic resistance. The use of probiotics alone or in combination with antimicrobials positively alters the vaginal microflora and prevents vaginal infections.

Vaginal colonization of lactobacilli in the vagina promotes metabolizing glycogen and producing lactic acid and maintains intravaginal health by lowering the intravaginal pH level. A lower vaginal pH inhibits uropathogen growth, preventing vaginal infections. Increases intravaginal pH, resulting in increased vaginal colonization by harmful microorganisms (e.g., Enterobacter, Escherichia coli, Candida, and Gardnerella). Probiotics positively effects on vaginal microflora composition by promoting the proliferation of beneficial microorganisms, alters the intravaginal microbiota composition, prevents vaginal infections in postmenopausal. Probiotics also reduce the symptoms of vaginal infections (e.g., vaginal discharge, odor, etc.), and are thus helpful for the treatment and prevention of BV and VVC.

Specific strains of lactobacilli bacteria have been found to help and prevent intimate infections.

These bacteria act in a number of mechanisms:

- Prevention of adherence to pathogens for vaginal epithelial cells (1)
- Creation of antimicrobial components such as: bacteriocins (protein toxins), lactic acid, and 2H<sub>2</sub>O (1)
- Destruction of the biofilm structure of pathogenic bacteria and vaginal candida (1,2)
- Restoring natural vaginal flora to firm (2)

## LLP® Prenatal

For vaginal benefits for women during pregnancy

**Active ingredient** - 7.5 billion (7.5x10<sup>9</sup> CFU) in 2 units:

- Lactobacillus acidophilus La-14
- Lactobacillus rhamnosus HN001

Natural fibers from native chicory inulin

**Optional with:** Folic acid, Vitamin D

### Benefits:

Delivering immune, mood and vaginal benefits for women during pregnancy

- Helping to keep women healthy during pregnancy
- Supporting immune health of mother and baby
- Promoting mother's happiness and calmness
- Helping to maintain healthy vaginal microbiota and pH



VitaBites  
ready solutions



## Liposomal Vitamins C + D3

Immune support

### Active ingredient:

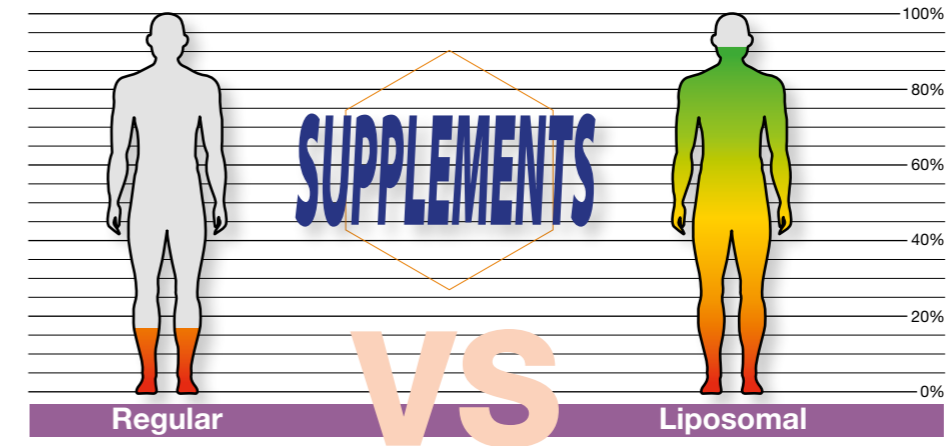
- Liposomal Vitamin D3
- Liposomal Vitamin C
- Zinc
- Elderberry extract

### Available options:

- sugar/sugar free
- milk powder/coconut milk



## Why liposomal form of vitamins?



- |   |  |
|---|--|
| - losses during digestive processes   | + protected during digestive processes   |
| - lower transport capacity from intestine   | + highest transport capacity from intestine  |
| - lower transport capacity from blood into cells  | + highest transport capacity from blood into cells                                     |
| - active ingredients are excluded from the body with minimal use  | + active ingredients are used from more than 95%                                       |
| - low bioavailability   | + highest bioavailability  |
| - low effectivity   | + highest effectivity  |
| - generate wasteproducts  | + no wasteproducts   |
| - active ingredients are usually wrapped with fillers and additives, which must be later excluded by the body | + after delivering active ingredients liposome blends into cell walls and nourishes it |

## Magnesium + Ashwagandha

For fatigue and stress

**Active ingredient:**

- Ashwagandha
- Magnesium

**Available options:**

- sugar/sugar free
- milk powder/coconut milk



## CBD + Saffron

For good mood

**Active ingredient:**

- CBD
- Saffron

**Available options:**

- sugar/sugar free
- milk powder/coconut milk



## CBD + Melatonin

Calm and better sleep quality

**Active ingredient:**

- Melatonin
- CBD

**Available options:**

- sugar/sugar free
- milk powder/coconut milk



## Beauty

For skin, hair & nails

**Active ingredient:**

Biotin

**Available options:**

- sugar/sugar free
- milk powder/coconut milk



## Calcium + Vit. D3

For healthy bones and teeth

**Active ingredient:**

- Calcium
- Magnesium
- Vitamin D3

**Available options:**

- sugar/sugar free
- milk powder/coconut milk



## Multivitamin

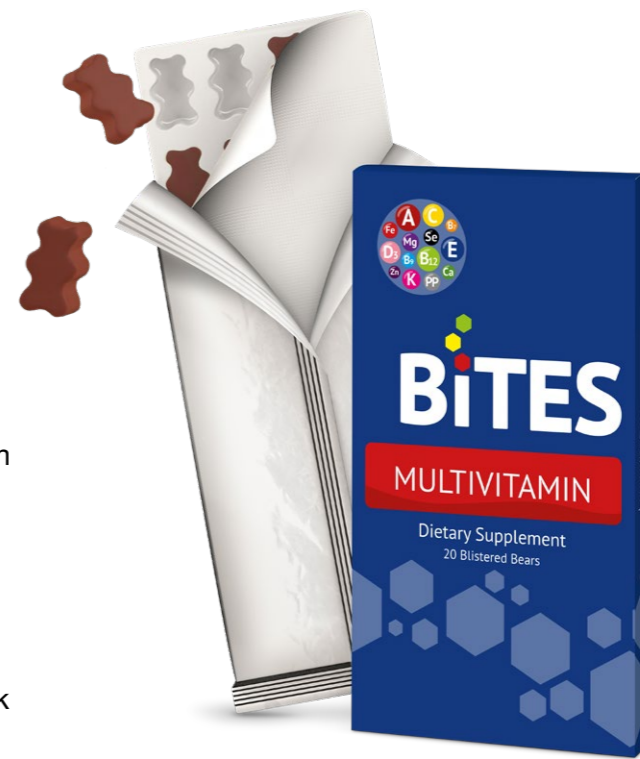
For overall growth

**Active ingredient:**

- |             |            |
|-------------|------------|
| Vitamin A   | Biotin     |
| Vitamin D3  | Folic acid |
| Vitamin E   | Vitamin C  |
| Vitamin B1  | Calcium    |
| Vitamin B2  | Zinc       |
| Vitamin B3  | Iron       |
| Vitamin B5  | Magnesium  |
| Vitamin B6  | Selenium   |
| Vitamin B12 |            |

**Available options:**

- sugar/sugar free
- milk powder/coconut milk



## Calcium

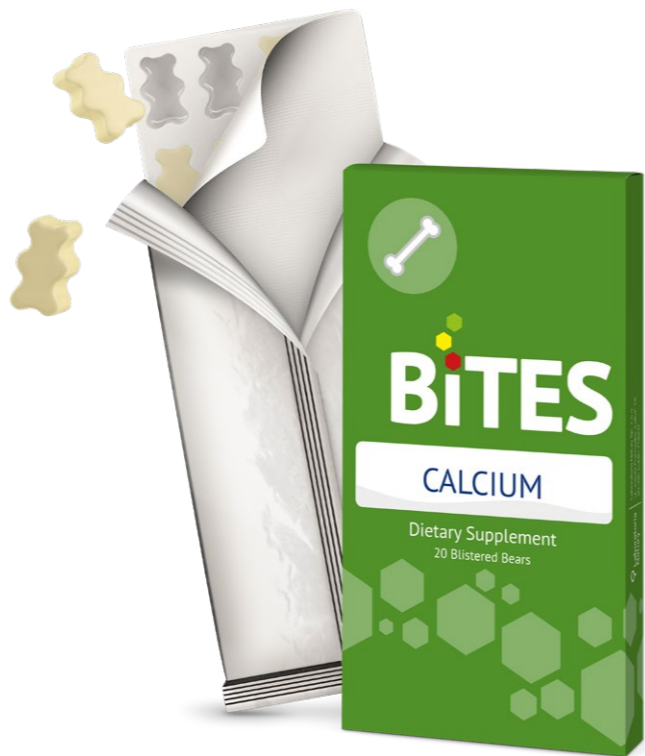
For proper energy metabolism

### Active ingredients:

Calcium

### Available options:

- sugar/sugar free
- milk powder/coconut milk



## VitaBites - Excellence Awarded



**Best tasting functional plant based product – winner**

CBD+Saffron+Chilii Vitabites, Vitafoods Europe 2021



**Best Tasting functional food- Runner Up**

Femina probiotics, Vitafoods Europe 2019



**Best New Product award**

USA Kids Cubes, 2014



**Health & beauty award and Unity Popular choice award**

Incontech, Singapore PN Kids Multivitamin, 2013



**Best Favorable Product award**

Switzerland Vitafoods, FPE Tasting Bar, 2011



**Super Product award**

Poland for Acidolac Junior, 2010



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