



**For expecting or nursing mothers:** take 1/2 level teaspoon daily mixed with 1 ounce of unchilled filtered water, non-fat rice, almond or soy milk or non-acidic juice. Mother's health is very important to developing and nursing babies. Mothers benefit from **LIFE START VEGAN** but should also supplement with **HEALTHY TRINITY®** for optimal health.

### INGREDIENTS

*Bifidobacterium infantis*, NLS super strain containing organic whole grain brown rice milk concentrate, organic brown rice protein, cellulose powder, and organic whole grain brown rice syrup solids.

### STORAGE AND HANDLING

Keep refrigerated and dry to maintain potency guarantee. Do not freeze or expose to moisture, heat or direct sunlight. Do not accept if seal is broken.

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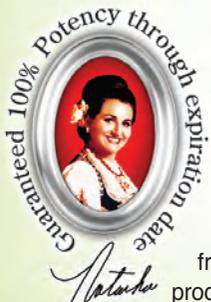
1.25 ounce powder

### POTENCY GUARANTEE

Minimum of 1 billion colony forming units (cfu) of live, active *B. infantis*, NLS super strain per serving (approximately 1/4 teaspoon) guaranteed through the printed expiration date, if kept dry and refrigerated.

### MY QUALITY COMMITMENT

Probiotic pioneer Natasha Trenev has been committed to formulating and manufacturing probiotics of unparalleled quality for 30 years. Natren has willingly subjected itself to the most stringent international manufacturing quality control process, undergoing extensive testing from raw materials to finished probiotic products. Your health is that important to us.



These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

### References:

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11. Garrido, D.D., D.C.; Mills, D.A. " Consumption of human milk glycoconjugates by infant-associated bifidobacteria: mechanisms and implications." Microbiology (2013) 159: 649-664.

### CONTACT US

To speak with a Natren Probiotic Specialist, call:

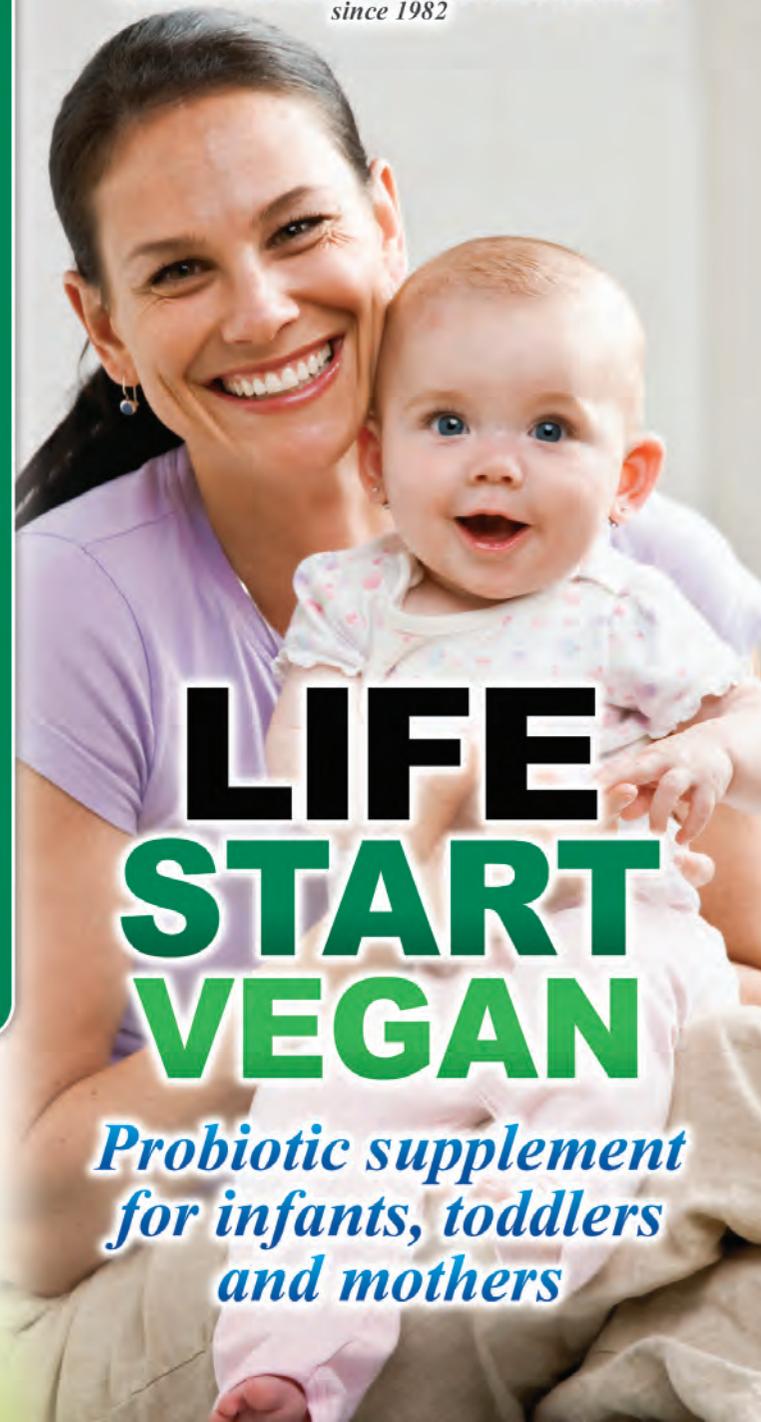
**800.992.3323**  
**www.natren.com**

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since 1982



**LIFE  
START  
VEGAN**

*Probiotic supplement  
for infants, toddlers  
and mothers*

## WHY *Bifidobacterium infantis*, NLS?

Infants are bathed in protective, beneficial microflora as they pass through their mother's birth canal. As a result, babies delivered vaginally are bathed with friendly, protective *Bifidobacteria*. In contrast, babies delivered by caesarian section (C-section) become bathed in the bacteria from their environment—most often, they're exposed to the bacteria on the skin of their mother and the bacteria in the hospital delivery room. When this occurs, babies lose out on the benefits that *B. infantis* supplies. They miss the natural boost to their natural defenses, and don't receive the digestive support for their inexperienced gastrointestinal tract—not the best start to lifelong health.

Breastfeeding by a healthy mother further enriches an infant's protective microflora and enhances an infant's growth and development. For example, probiotic microorganisms set up attachment sites on the infant gastrointestinal (GI) wall to form a microbial barrier that protects against invasion from less desirable and potentially harmful microorganisms. *B. infantis* is a natural inhabitant of the intestines in human infants and also occurs in small numbers in the human vagina.<sup>1,2</sup> In addition, it is one of the predominant bacteria in the infant's large intestine along with other *Bifidobacteria* species such as *B. bifidum*, *B. longum*, and *B. breve*.

## *B. infantis* AND BREAST MILK

Human breast milk evolved for three purposes: **1)** Supply the nutritional needs of the infant; **2)** Expose the infant to maternal immune properties; **3)** Shape the infant gut microbiota. Breast milk is a fluid synthesized at the mother's expense and shaped throughout evolution to nourish the infant and improve its rate of survival. Breast milk provides many benefits for the infant. For example, not



only is breast milk the best food for the infant, but it also provides human milk oligosaccharides that stimulate *Bifidobacterium infantis*. Many metagenomic studies show that *Bifidobacterium* is a dominant genus in the intestinal microbiota of breast-fed infants. In some cases, *Bifidobacterium* takes up approximately 75% of total bacteria. The representation of *Bifidobacterium* is less observed in formula-fed infants, who have more of a diverse microbiota. The difference in bacterial colonization between breast-fed and formula-fed infants can be explained in great part by the non-essential components in human milk.

The predominance of *Bifidobacterium* in breast-fed infants was first noticed over 100 years ago. It suggested that breast

milk contained certain molecules that stimulated the growth of these bacteria, defined as *Bifidus* factors. In a 1980 German study, *B. infantis* was the predominant beneficial bacteria found in infants. Alarmingly, since that time, researchers have found a decline in the numbers of *B. infantis* found in infants, including breast-fed infants.<sup>1,2</sup> The difference of the microbiota of breast-fed healthy infants is demonstrated for its specific selection of *B. infantis* species and also to some extent *B. bifidum*. Basically, it appears that by the process of evolution and selection, breast-milk components favor the growth of *B. infantis*. Therefore, we should mimic what evolution has taught us and supplement with only *B. infantis* to enhance the infant gut microbiota.<sup>11</sup>

## *B. infantis* CHARACTERISTICS

*Bifidobacteria*, including *B. infantis*, have the following characteristics:

- (1) Anaerobic bacteria (does not require oxygen for growth).
- (2) Produce acetic and lactic acids, and small amounts of formic acid, from carbohydrates. These organic acids increase the acidity of the intestines and thereby inhibit undesirable bacteria.<sup>3,4</sup>
- (3) Optimum growth occurs at 98-105° F.
- (4) Prevent the colonization of the intestines by pathogens by competing for nutrient and attachment sites.<sup>5,6</sup>

- (5) Assist nitrogen retention and weight gain in infants.<sup>1</sup>
- (6) Inhibit bacteria that convert nitrates to potentially harmful nitrites.<sup>7</sup>
- (7) Produce vitamins in the B-complex family.<sup>8</sup>

As reported, *Bifidobacteria* and the specific substances they secrete can protect the intestinal mucosa in infants.<sup>9,10</sup> When the microflora of infants becomes disturbed from oral antibiotic therapy, vaccinations, convalescences or sudden weather changes, the levels of *Bifidobacteria* decline and lead to lower levels of digestive health. The use of a *Bifidobacterium infantis* NLS supplement can help with the nutritional restoration of the intestinal microflora.

## UNIQUE FEATURES

● The **Trenev Process**<sup>®</sup> uses a unique process to substantially increase the probiotic activity, while eliminating the need for additives. By keeping the bacteria in their natural environment (supernatant), provided by the brown rice ferment, the **Trenev Process** can ensure potency and effectiveness.

- ✓ Researched, formulated and manufactured by Natren Inc.
  - ✓ Low-allergenic organic brown rice base
  - ✓ Gluten Free
  - ✓ Soy Free
  - ✓ No FOS
  - ✓ No GMOs\*\*
  - ✓ True dairy free (no casein or *B-Lactoglobulin*)
- \*\* (No genetically modified organisms--Natren does not use ingredients produced by biotechnology)



## SUGGESTED USE

**For infants:** use 1/4 level teaspoon daily mixed with 1 ounce unchilled, filtered (chlorine-free) water, preferably before meals to optimize digestion. If using infant formula, use a portion of the formula to dissolve **LIFE START**<sup>®</sup> **VEGAN**, then add the mixture to the remaining formula and shake the bottle to thoroughly mix. **LIFE START VEGAN** should be taken at least 2 hours apart from herbs, garlic and prescription drugs for optimal results.