

HOWARU[®] PROTECT BABY

Establishing a Healthy Microbiota and Immune Support in Early Life

Howaru[®]

WHAT'S INSIDE

1 Billion CFU of

*Lactiplantibacillus plantarum**
(HOWARU Lp-202195[™]) +

150 mg of Fructooligosaccharide
(FOS)

*Formerly *Lactobacillus*

KEY BENEFITS



Provides immune support for infants



Supports baby's gut and immune system development



Promotes increased levels of healthy bacteria in an infant's intestinal tract



THE FIRST 1,000 DAYS: A WINDOW OF OPPORTUNITY

Optimal immune health development starts at the very beginning of life. The first 1,000 days – **from conception to 2 years old** – are significant for microbiota development. And since a healthy microbiota is critical for immune maturation, new parents have a brief window of opportunity to foster their infants' healthy gut microbiota – and bolster short and long-term immune health.

During the first 1,000 days of life, probiotics' interaction between gut microbes and host cells **help mature the immune system, impacting infants' health down the road**. Specific probiotics may not only reinforce the gut barrier but also initiate signals that call immune cells to action in the gut and throughout the body. These signals can affect immune system maturation and may promote long-term health.



[Click a signifier on the right to learn more about the early development of microbiota.](#)





HOWARU® PROTECT BABY PROVIDES AN INNOVATIVE SOLUTION

Immune health is top-of-mind for new parents. And as consumer understanding continues to grow around the impact a healthy gut can have on immune health, the industry has seen a 68% uptick in infant dietary supplement launches with immune health claims.^{iv}

To help brand owners equip parents with an effective infant immune support solution, HOWARU® has launched HOWARU® Protect Baby (*L.plantarum* (HOWARU Lp-202195™), plus FOS). The unique probiotic strain in HOWARU® Protect Baby, in combination with FOS, has been shown to increase healthy bacteria in infants' intestinal tracts, and support baby's gut health and immune system maturation, from the very start.

The distinctive strain within HOWARU® Protect Baby is well-documented, proven safe and backed by robust clinical trials – including one of the largest clinical trials of infants to date. Altogether, the combination of *L. plantarum* ATCC-202195 plus the prebiotic FOS has been shown to provide significant immune and digestive health benefits in infants, after just seven days of supplementation.

68%

Growth of infant dietary supplement launches with immune claims between 2019-2020

CLINICAL TRIAL RESULTS

L. plantarum ATCC-202195, the strain in HOWARU® Protect Baby, and fructo-oligosaccharide (FOS) were investigated in India for their effects to prevent severe infections in neonatal infants in a randomized, double-blind, placebo-controlled clinical trial with 4,556 healthy newborns. Infants received oral supplementation of 1B CFU of *L. plantarum* – and 150 mg of FOS – daily for seven days, starting on the second to fourth day of life; participants were monitored daily for over 60 days.^v



4,556

healthy newborns
participated in the
clinical trial

CLINICAL TRIAL RESULTS

In another randomized, double-blind, placebo controlled clinical study, researchers sought to determine the impact of *L. plantarum* ATCC-202195 and FOS supplementation to a neonatal cohort, following seven days of administration on colonizing ability, tolerance^{vi} and changes in the developing gut microbiota.^{vii} Thirty-one healthy newborns (19 treatment, 12 placebo) were investigated – the probiotic group received 1B CFU of *L. plantarum* ATCC-202195 and 150 mg FOS, within 72 hours from birth for seven days and followed for 6 months.

To investigate microbiota colonization, comprehensive stool cultures were conducted periodically and at baseline, for qualitative and quantitative analysis. The changes in microbiota development in stool fractions were based on 16s rRNA sequencing.





IMMUNITY SUPPORT FOR BABIES

If you're seeking to craft a product supporting a healthy start for infants, HOWARU® Protect Baby can help. *L. plantarum* (HOWARU Lp-202195™) – the safe, clinically studied strain in HOWARU® Protect Baby – in combination with FOS, has been shown to be effective in one of the largest probiotic clinical trials in infants to date.* Consider integrating HOWARU® Protect Baby into your existing products to bolster their benefits or craft new, innovative early life products to meet rising consumer trends.

Our HOWARU® Promise

As a trusted global leader in probiotic solutions, we offer the broadest range of robust, clinically-studied strains. You can be confident that our extensive portfolio, strong consumer insights, and unmatched global support and services make us your ideal partner in probiotic innovation.

Our strains are:

- Backed by science
- Identified with complete genome. Every strain has been sequenced and fully assembled
- Tested for virulence and toxigenic properties and the absence of antibiotic resistance transfer potential
- Tested for toxicity to confirm safety for human consumption
- Formulated and evaluated to ensure viability through end of shelf life
- Generally recognized as safe or FDA notified without objection as a new dietary ingredient
- Manufactured in the USA under FDA good manufacturing practices

**Provided to infants as a synbiotic supplement of *L. plantarum* ATCC-202195, plus FOS*



Where science
& creativity meet

[†]Yatsunenkeno T., et al. Nature (2012), 486:7402: 222

[‡]Kollmann TR., et al. Immunity (2012), 37:5:771

[§]Ottman N., et al. Front Cell Infect Microbiol (2012), 9:2:104

[¶]Mintel GNDP

[¶]Panigrahi, P., et al. Nature (2017) 548: 407

[¶]Panigrahi P., et al. J. Pediatr. Gastroenterol. Nutr. (2008) 47:45

[¶]Chandel DS., et al. J. Pediatr. Gastroenterol. Nutr. (2017) 65:218

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